

A Natural Shelter

Kellogg

ARBOR AND BIRD DAY ANNUAL

INDIANA

1906

ISSUED BY
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
FASSETT A. COTTON

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UNITED STATES OF AMERICA
STATE OF INDIANA
EXECUTIVE DEPARTMENT



A PROCLAMATION:

In accordance with custom, and in the interest of forestry cultivation, I, J. Frank Hanly, Governor of the State of Indiana, do hereby designate and proclaim FRIDAY, APRIL 27, and FRIDAY, OCTOBER 26, 1906, as

Arbor Days,

and earnestly recommend that each of said days be observed by the people throughout the State as a day of rest and celebration; that these days be characterized by the planting of trees and shrubs upon the grounds about public buildings and public institutions, upon public highways and about private homes.

It is further recommended to those in charge of the schools of the State, both public and private, that each of said days be observed, as far as practicable, by public exercises of a character calculated to impress their respective pupils with the wisdom and necessity of the planting, the culture and the care of trees.

Let us add to the beauty and the adornment of our public grounds, our public highways and our own homes by a general observance of the recommendations herein made, that those who come after us may inherit a land of tree and shrub, of flower and fruit.

Done at the Capitol of Indiana, in the City of Indianapolis, this 18th day of April, in the year of our Lord, nineteen hundred and six, in the year of the independence of the United States the 130th and of the State of Indiana the 90th.

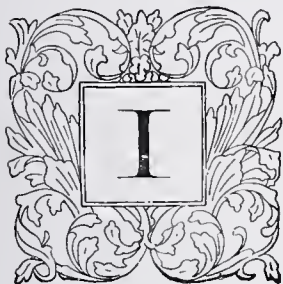
J. FRANK HANLY,
Governor of Indiana

(SEAL)

By the Governor:

FRED A. SIMS,
Secretary of State

To the Teachers and Pupils of Indiana



HAVE met with unusual good fortune in obtaining excellent material for the Arbor and Bird Annual. The suggestions contained in this number are exceptionally practical, and cannot fail to help those who know even the least about birds and tree planting.

The articles were prepared by very busy people. Dr. Kellogg is a minister who finds an hour now and then to do some excellent bird hunting with his camera, and it is to him we are all indebted for the greater number of pictures herein. Mr. Wilson is one of Indiana's strongest school superintendents. He wrote this article while in Columbia College this summer, stealing precious minutes from his regular work. The others are equally as busy, but all are more than happy to send their greetings in this way to the children of Indiana.

In planning for your school ground decorations, I suggest that you read carefully the article by Prof. L. H. Bailey, "Hints on Rural School Grounds," then carry out his suggestions as far as possible; study your building and your ground, make blackboard maps designating places for planting. This talking the matter over together will help wonderfully in deciding what to do and how to do it. Make definite plans and carry them out. It seems to me that it would be a good plan to do all your planting before Arbor Day; then on that day entertain your patrons and friends by presenting the literary program which you have prepared well. After the program invite your visitors to inspect your good work on the grounds.

In making your plans do not forget the birds. The article on "Bird-Boxes" will help you.

I call the attention of the children especially to the three short compositions about birds, pages 62-63. These are simply accounts of their own observations. It is possible for many children over the State to do the same. What a wonderful thing it would be to have an entire Annual made by the children! Can you not send letters for next year? With best wishes for a prosperous year,

I am, sincerely,

FASSETT A. COTTON.

Historic Trees

I do not wonder that the great earls value their trees, and never, save in the direst extremity, lift upon them the axe. Ancient descent and glory are made audible in the proud murmur of immemorial woods. There are forests in England whose leafy noises may be shaped into Agincourt, and the names of the battlefields of the Roses; oaks that dropped their acorns in the year that Henry VIII held his Field of the Cloth of Gold, and beeches that gave shelter to the deer when Shakespeare was a boy. There they stand, in sun and shower, the broad-armed witnesses of perished centuries; and sore must his need be who commands a woodland massacre. A great tree, the rings of a century in its boll, is one of the noblest of natural objects; and it touches the imagination no less than the eye, for it grows out of tradition and a past order of things, and is pathetic with the suggestions of dead generations. Trees waving a colony of rooks in the wind today are older than historic lines. Trees are your best antiques. There are cedars on Lebanon which the axes of Solomon spared, they say, when he was busy with his Temple; there are olives on Olivet that might have rustled in the ears of the Master of the Twelve; there are oaks in Sherwood which have tingled to the horn of Robin Hood, and have listened to Maid Marian's laugh. Think of an existing Syrian cedar which is nearly as old as history, which was middle-aged before the wolf suckled Romulus; think of an existing English elm in whose branches the heron was reared which the hawks of Saxon Harold killed! If you are a notable, and wish to be remembered, better plant a tree than build a city or strike a medal—it will outlast both.—Alexander Smith.

Why Children Should be Interested in Planting Trees

OVERTON W. PRICE

There are two main reasons for interesting the children of Indiana in tree planting. The first of these is the good which would follow to the State; the second, the good which would follow to the children. Since, however, the children will soon become men and women, with the good of the State at heart, it is plain that they are affected by both these reasons.

Tree planting will be for the good of the children—this is the fundamental fact. The southern part of Indiana was once well covered with a fine hardwood forest, and towards the south it still has small areas of good forest growth, but the settlement and development of the country entailed rapid and wasteful clearing for agriculture. The soil was generally so fertile that this clearing was justified in good part by the promise of the more profitable farming crops; but the waste was in every way deplorable, though it was natural enough where wood was very plentiful and market was wanting, and where lumbering paid only for the best class of timber. Fields and fences were the prizes which the farmers sought. So the splendid woods were cut, and the smaller trees were made into posts and split up into rails; the larger logs, in many cases, were piled and burned as bonfires at the “log-rolling bees.” Thus the soil was cleared; farms spread and magnificent hardwood forests dwindled.

Yet nearly every farm has land too poor or rough for any satisfactory crops but trees. Again, as every farmer knows, a wood-lot is worth having, even if it must occupy a bit of so-called agricultural land. Fuel and fences, and much of the material for out-buildings and repairs can be raised and cut in the wood-lot cheaper and more handily than they can be bought in the market. The wood-lot is an essential part of the farm. Where past clearing has stripped the farm bare of trees a wood-lot may well be planted, even without regard to the probable rise in the market



Kellogg

A Marlon County Scene

prices of wood. If these prices do rise, as all signs appear to indicate, the wood-lot of the future will supply its products to the farm at so much the greater saving, or secure for them so much the better returns in the market.

As a last word upon the wood-lot subject, it is well to remember that a wood-lot is one-third of a forest, or, in other words, that our American wood-lots take up one-third of the total forest area of the country. Where the larger tracts have been cleared or too heavily culled it is quite possible that it may become increasingly necessary for the wood-lot to supply the industries, or at least to tide them over shortages. In several regions this tendency is already well marked.

What is true of the wood-lot situation is largely true of the greater body of woodlands which we think of under the name of forests. In Indiana, as elsewhere, it is of the utmost importance that a proper proportion of land be kept in forest. Though absolute forest land—land suited for tree crops only—is not especially extensive in the State, this fact is offset by another fact which is too lightly overlooked. Land poor enough to be absolute forest land is too poor for the best growth of certain forest species, among which are several so valuable that they are entitled to a place on the better soils, and will yield returns which compare well with those from agricultural crops. Some of the more valuable hardwoods, such as oaks and hickories, grow well in the State, and should no more be crowded out of it by agriculture than the farm wood-lot should be crowded out by the field and pasture. Norway spruce, red, Scotch and white pine and European larch are among the conifers which thrive and which should be planted on the forest soils where these and other forest species have been unwisely moved, or destroyed by fire. Catalpa, whose fast growth and high utility are well known, but whose insistence on good soil has not been sufficiently understood, will grow well on the better soils of Indiana.

The motive of patriotism, while sometimes narrow and selfish, may be made to produce good fruits in action, especially with children, for which it is often a disinterested emotion. The welfare, the integrity of the State of Indiana is threatened by the enemies of the forest. Stripped bare of trees it would be exposed to weakness as compared with forested rival States. For the forest is a natural defense of a country, a safeguard against dependence. If Indiana could not grow and harvest her own wood products, she would have to purchase them elsewhere—she would be to that

extent, in a business way, at the merey of her competitors in the race of development. Patriotism demands, then, that woodlands be cherished, whether in the form of larger forests or home wood-lots on the farm. Patriotic boys and girls will feel that they have done something to add to the greatness of their State if they have planted in their school days trees which attain maturity with themselves. Still more important are the lessons they will learn by planting individual trees if the relation of the single tree to the forest and the proper methods in use in larger operations are fully brought out.

Again, children need to know and appreciate the dependence of man on nature. To plant an acorn or a pine seed is to encourage nature to aid man in the time of need. Tree planting is indeed one of the best possible ways of showing children how, through the generous coöperation of nature, a little well-directed thought and care can produce results out of all proportion to the effort expended.

Even to grown men the good of posterity is rather a vague idea, yet a graphic account of the sufferings which thoughtless and wasteful action will inflict on the next generation will help to make this ideal seem real and urgent to the sympathetic minds of children.

So much for general consideration which affect the planting of forest trees by children. Now as to the practical forms which the planting may well take.

Windbreaks and shelterbelts on the farm are very good projects for planting by school children. Comparatively few trees are required: these are easily had, when small seedlings are obtainable, from the neighboring woods; their growth and cultivation will afford a constant and interesting object lesson; they will be highly practical and appreciated by the farmer. Moreover, only a few years are required to get results, a fact which counts not a little. Then, later on, when the trees have attained good size, the shelterbelt may be handled as a wood-lot as well, and thinned for needed wood, while as an example to the children and the community it will be invaluable.

In beautifying the school grounds the children may find another good field for planting. Good results will follow in two ways—in cultivating a love of nature, and in imparting a knowledge of tree life. Too often neither of these ends is attained, because the whole work stops with the planting, and the trees, perhaps ill selected, perhaps unintelligently planted, are left to battle with un-

equal odds and, finally, to die. This is discouraging, and is quite unnecessary. Let the proper degree of knowledge and thought be brought to the selection of the trees in the first place, then to their planting, and constantly thereafter to their care and protection, and there is no difficulty whatever in the way to success. Furthermore, it is only through this thoughtful attention to the details of planting and care that the work becomes useful; for not only is failure disheartening, but even success, could it be achieved haphazard, can have no educative value. Pains and vigilance, on the other hand, and a true understanding of tree life, enable the children to extract the true meat from the work, which is, after all, not so much the trim appearance of one school yard as rather the development of an intelligent interest in tree life in general and in the forest welfare of Indiana in particular.

Hints on Rural School Grounds

PROF. L. H. BAILEY, CORNELL UNIVERSITY

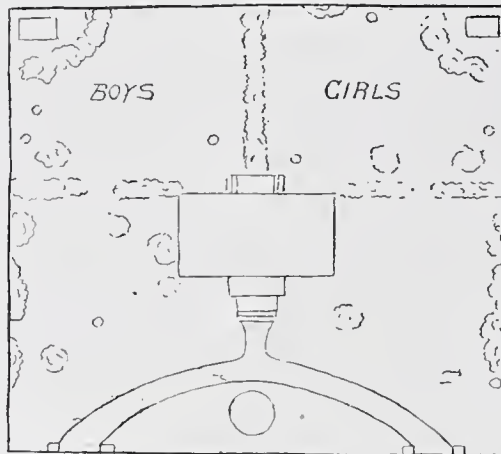
One's training for the work of life is begun in the home and fostered in the school. This training is the result of a direct and conscious effort on the part of the parent and teacher, combined with the indirect result of the surroundings in which the child is placed. The surroundings are more potent than we think, and they are usually neglected. It is probable that the antipathy to farm life is often formed before the child is able to reason on the subject. An attractive playground will do more than a profitable wheat crop to keep the child on the farm.

HOW TO BEGIN A REFORM

We will assume that there is one person in each rural school district who desires to renovate and improve the school premises. There may be two. If this person is the school commissioner or the teacher, so much the better.

Let this person call a meeting of the patrons at the schoolhouse. Lay before the people the necessity of improving the premises. The coöperation of the most influential men in the district should be secured before the meeting is called.

Propose a "bee" for improving the school grounds. John Smith will agree to repair the fence (or take it away, if it is not needed).



Plan of model schoolhouse and grounds

Jones will plow and harrow the ground, if plowing is necessary. Brown will sow the grass seed. Black and Green and White will go about the neighborhood with their teams for trees and bushes. Some of these may be got in the edges of the woods, but many of the bushes can be picked up in front yards. Others will donate their labor toward grading, planting and cleaning up the place. The whole thing can be done in one day. Perhaps Arbor Day can be chosen.

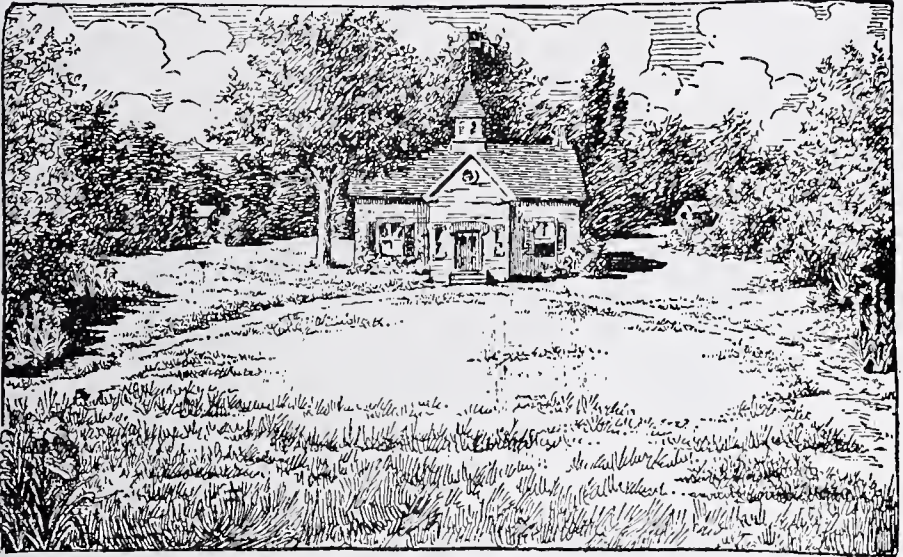


Fig. 1. A picture, of which a schoolhouse is the central figure

THE PLAN OF THE PLACE

This is the most important part of the entire undertaking—the right kind of a plan for the improvement of the grounds. The person who calls the meeting should have a definite plan in mind, and this plan may be discussed and adopted.

BEGIN WITH THE FUNDAMENTALS, NOT WITH THE DETAILS

Most persons reverse this natural order when they plant their grounds. They first ask about the kinds of roses, the soil for snowballs, how far apart hollyhocks shall be planted. It is as if the artist first asked about the color of the eyes and the fashion of the necktie; or as if the architect first chose the color of paint and then planned his building. The result of this type of planting is that there is no plan, and the yard means nothing when it is done. Begin with the plan, not with the plants.

THE PLACE SHOULD MEAN SOMETHING

The home ground should be homelike, retired and cozy. The school ground should be set off from the bare fields, and should be open enough to allow of playgrounds. It should be hollow—well-planted on the sides, open in the interior. The side next the highway should contain little planting. The place should be a picture, not a mere collection of trees and bushes. Fig. 1 shows what I mean.

As seen in the picture (Fig. 1), this style of planting seems to be too elaborate and expensive for any ordinary place. But if the reader will bear with me, he shall learn otherwise.

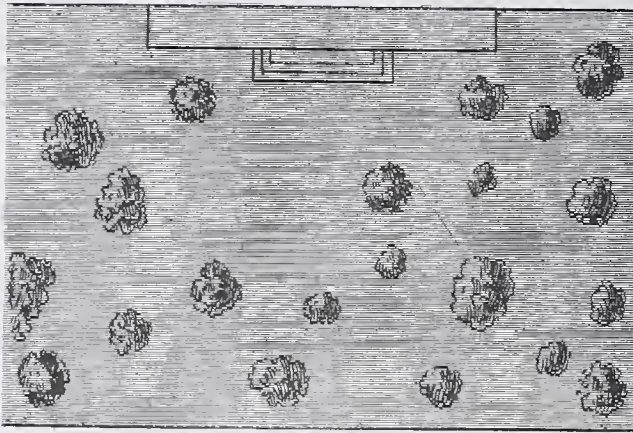


Fig. 2. Common or nursery type of planting

KEEP THE CENTER OF THE PLACE OPEN

Do not scatter the trees over the place. They will be in the way. The boys will break them down. Moreover, they do not look well when scattered over the whole area. When an artist makes a picture with many people in it, he does not place the persons one by one all over his canvas; he masses them. Thereby he secures a stronger effect. He focuses attention, rather than distributes it.

The diagrams (Figs. 2, 3) make this conception plain. The same trees and shrubs can be used to make either a nursery or a picture. But it is more difficult to make the nursery, and to keep it in order, because the trees grow one at a place in the sod, and they are exposed to accidents.

Go to the blackboard. With four lines represent the borders

of the school grounds, as in Fig. 4. Indicate the schoolhouse and the outbuildings.

Existing trees may be located by small circles. Now you have the facts, or the fixed points.

Now put in the walks. The first fixed point is the front door. The other fixed point is the place or places at which the children enter the grounds. Join these points by the most direct and simplest curves possible. That is all there is of it. In many, or perhaps most places, the house is so near the highway that only a straight walk is possible or advisable.

Next comes the planting. Let it be irregular and natural, and represent it by a wavy line, as in Fig. 4. First of all, cover up the outhouses. Then plant heavily on the side, or in the direction

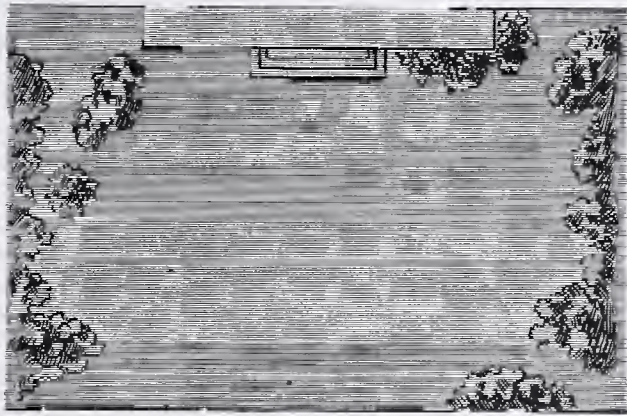


Fig. 3. The proper or pictorial type of planting

of the prevailing wind. Leave openings in your plan wherever there are views to be had of fine old trees, attractive farm homes, a brook, or a beautiful hill or field. Throw a handful of shrubs into the corners by the steps and about the bare corners of the building.

You now have a plan to work to. It has been the work of five minutes at the blackboard.

Sometimes the problem is not so simple as all this. There may be three entrances to the grounds and a highway on two sides. Fig. 5 is a plan made for such a place in western New York. It was thought to be necessary to separate the playgrounds of the boys and girls. This was done by a wide hedge-row of bushes running back from the schoolhouse.

Perhaps some persons object to so much shrubbery. They look

upon it as mere brush. Very well, then use trees alone. But do not scatter them hit and miss over the place. Give room for the children to play; and make the place a picture at the same time. Three or four trees may be planted near the building to shade it, but the heaviest planting should be on the sides.

MAKING THE SOD

In many cases the school yard is already level or well graded and has a good sod, and it is not necessary to plow it and re-seed it. It should be said that the sod on old lawns can be renewed without plowing it up. In the bare or thin places, scratch up the ground with an iron-toothed rake, apply a little fertilizer, and sow more seed. Weedy lawns are those in which the sod is poor. It may be necessary to pull out the weeds; but after they are out, the

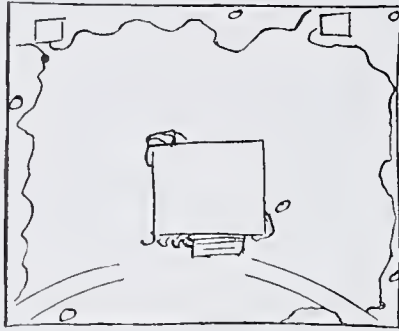


Fig. 4. The blackboard plan

land should be quickly covered with sod, or they will come in again. Annual weeds, as pigweed, ragweed, can usually be crowded out by merely securing a heavier sod. A little clover seed will often be a good addition, for it supplies nitrogen, and has an excellent mechanical effect on the soil.

The ideal time to prepare the land is in the fall before the heavy rains come. Then sow in the fall, and again in early spring on a late snow. However, the work may be done in spring, but the danger is that it will be put off so long that the young grass will not become established before the dry, hot weather comes.

THE KINDS OF PLANTS FOR THE MAIN PLANTING

We now come to the details—the particular kinds of plants to use. One great principle will simplify the matter: the main plant-

ing should be for foliage effects. That is, think first of giving the place a heavy border mass. Flowers are mere decorations.

Select those trees and shrubs which are the commonest, because they are cheapest, hardiest and most likely to grow. There is no district so poor and bare that enough plants cannot be secured, without money, for the school yard. You will find them in the woods, in old yards, along the fences. It is little matter if no one knows their names. What is handsomer than a tangled fence-row? Scatter in a few trees along the fence and about the buildings. Maples, basswood, elms, ashes, buttonwood, pepperidge,

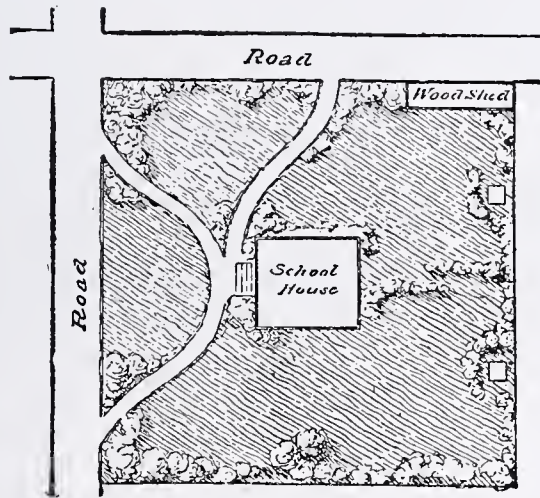


Fig. 5. Suggestions for the planting of school yard upon four corners. From "Lessons with Plants"

oaks, beeches, birches, hickories, poplars, a few trees of pine or spruce or hemlock—any of these are excellent.

For shrubs, use the common things to be found in the woods and swales, together with roots which can be had in every old yard. Willows, osiers, witch-hazel, dogwood, wild roses, thorn apples, haws, elders, sumac, wild honeysuckles—these and others can be found in every school district. From the farmyard can be secured snowballs, spireas, lilacs, forsythias, mock-oranges, roses, snowberries, barberries, flowering currants, honeysuckles and the like.

Vines can be used to excellent purpose on the outbuildings or on the schoolhouse itself. The common wild Virginia creeper is the most serviceable.

KINDS OF PLANTS FOR DECORATION

Against these heavy borders and in the angles about the buildings many kinds of flowering plants can be grown. The flowers are much more easily cared for in such positions than they are in the middle of the lawn, and they also show off better. Hollyhocks are very effective.

It is impossible to grow many flowers in the school ground under present conditions, for what is everybody's business is nobody's business; and then the place is neglected all through the summer.

We shall be very glad to correspond with any persons who are interested in improving school premises, either on the lines herein suggested, or in other directions. The improvement must come, or, one by one, the rural schools will die out for lack of pupils. In the struggle for existence, the pupils will more and more seek the more attractive schools. There must be rural schools, whether in the open country or hamlet: and wherever they are, they must be cheered and brightened.

A Flower Day every October would be a fitting complement of Arbor Day. Already flower shows have been held in various rural schools. They are symbols of the harvest. We want to focalize this movement in the coming year. We call upon every citizen for sympathy and coöperation.

The Planting of Rural School Grounds

CHAS. A. SCOTT, BUREAU OF FORESTRY
WASHINGTON

The need of planting trees on our rural school grounds is obvious to all who have given the proposition a serious thought. Suffice it to say that the objects for planting are threefold; first, plant for protection; second, plant to educate; third, plant to beautify.

The first and urgent need is some one possessing some knowledge of trees, who has time, and is willing to take in hand and superintend planting the school grounds. Such a person should be appointed superintendent of planting, by the school board. The duties of such a person would be to secure suitable trees and shrubs, direct the planting and care for the trees after planted.

In some instances it may be necessary to purchase the trees. The planting should be performed by the patrons of the school and the school children. The cultivation should also be volunteer work. Let Mr. Smith, who lives near the school, volunteer to cultivate them the first year under the direction of the superintendent of planting. Mr. Jones the second and Mr. Brown the third. Let this service be volunteered at the school meeting, then the entire community will know to whom credit is due for the splendid condition of the trees on the school grounds.

Naturally there will be some expense connected with planting and keeping the grounds in proper condition. A small sum should be appropriated each year for this purpose.

After thoroughly organizing for tree planting the next necessity is a planting plan. This includes an accurate map of the school grounds showing the location of the schoolhouse, outbuildings and the location of each tree to be planted. A few general rules for planting a school ground will enable the superintendent of planting to make a very good plan. In the first place, keep the objects of the planting in view. The first object is protection. Plant a dense belt or group of trees along the north and west sides of the schoolhouse for this purpose.

The second object is to educate. This is attained in every step of the work; first in having a variety of trees. The characteristics of each species is a distinct study. The operation of planting,

cultivating and trimming the trees is a source of education to the boys and girls. A study of the plan interests the little folks.

The third object is to beautify the grounds. After planting the shelter belts, plant an open row along one or both of the remaining sides, using care not to shut off the view too completely. Arrange a few artistic groups in the corners and between the divides of the walk.

The main body of the school grounds should be left unplanted for the playground. The outhouses should be screened by a clump of trees, and a nicely arranged group near the schoolhouse is advisable.

WHAT TO PLANT

In all instances the hardy species of native trees should be chosen for school yard planting. The white elm, green ash, hackberry, the Austrian and Banksiana pines are among the hardiest of trees. In soils containing considerable moisture the cottonwood and white willow may be added to the hardy list. These are all common species with the exception of the pines.

For ornamental planting there is nothing more hardy or more suitable for the purpose than many of our wild shrubs. The wild plum will grow any place and serves admirably for a screen or to fill in some corner, and it yields a profusion of flowers and fragrance every spring time. The wild currant will fill in a group or a corner; it is a mass of yellow with the first indication of spring. The false indigo or lead plant is another hardy shrub that tosses its tassels of purple and gold in the early spring breezes. The red haw and choke cherry are others which will grow if given a chance.

Some flowers are not out of place on the school grounds. Try a few of the hardy perennials that can be secured from some of the yards in the neighborhood. Make the path broad that leads from the road to the schoolhouse and plant a hedge of wolfberry along either side and see the effect.

HOW TO PLANT

Upon the proper planting depends the successful growth of the trees. Before planting the soil should be as thoroughly prepared as it would be for a field of corn. Trees should never be planted until the grass sod has been thoroughly subdued. The proposed planting site should be plowed in the fall; this subjects the soil

to the pulverizing influence of freezing and thawing. In the spring it should be thoroughly worked over with a disk harrow. For the alignment of the rows draw furrows six feet apart and set the trees six feet apart in the furrows. Their exact location can be determined by using a cord with a knot tied at each eight feet point. Unless the soil of the planting site is tenacious clay the holes for the trees should not be dug until the trees are on the ground ready for planting. Dig the holes deep enough and wide enough to receive the roots without crowding or cramping. Always set the trees two or three inches deeper in the soil than they formerly grew. When filling in always throw fresh moist earth next the roots and pack it firmly. It is a good plan to tramp the soil about the tree roots as you would in setting a fence post, exercising care not to injure the roots. An inch or two of the surface soil should be left lying loosely.

The character of the day on which the planting is done will also affect the success of the planting. Trees should always be planted on a cloudy, cool day. Their roots should always be protected as much as possible from the drying influences of the sun and wind by keeping them covered with wet gunny sacks or similar material. If the trees are received several days before the planting is to be done they should be heeled in a cool, moist place. It is a good idea to dip the roots in a bath or puddle just before planting. A puddle consists of clay and water mixed to a creamy consistency.

The practice of pouring a bucket of water about a tree immediately after planting is a questionable treatment. When trees more than six or eight feet in height are used fully one-half of their tops should be cut out in order to reduce their leaf surface and prevent exhausting the supply of moisture furnished by the roots.

ARRANGEMENT OF TREES

The general rules governing artistic planting that should be observed for school ground planting are briefly: Plant the taller growing trees in the outer row, the lower growing trees are planted in the inner rows and gradually decrease in size in the clumps until they blend into shrubbery.

When planting single rows of trees use one species only and select trees of uniform size as far as possible.

CULTIVATION

Wherever it is possible planted trees should receive thorough cultivation as long as a team and cultivator can be used in the plantation. In the case of individual trees and groups the spade is the best implement for general use. The soil should be spaded up and thoroughly pulverized to a depth of five or six inches three or four times each summer for a distance of four feet on either side of the tree. Whatever may be the method of cultivation it must be thorough; keep the surface soil loose and well stirred to prevent excessive evaporation of soil moisture and keep the ground free from weeds. Trees require cultivation in every respect as much as our field crops, and they respond to good treatment just as readily.

It should not be expected that all the planting can be done in one season, but rather it should be planned to continue over several years.

In this way the planting will be more complete and a greater interest will be created in the work.

Arbor Day is one of our grand institutions and should be celebrated by appropriate exercises in every school in our State. If the day is favorable planting the school grounds should be a part of the program, and the school children should assist in the work. If Arbor Day should unfortunately be a hot, windy day, the planting should be postponed until a cool, cloudy day.

Forest Fire Legislation*

Comprehending to a good degree the carelessness exhibited in the matter of forest fires and the great amount of damage done annually by them, and after devoting much time and study to the various forest fire laws and forest fire systems of other states and countries, the following act was passed by the last general assembly:

AN ACT providing for protection to forests and repealing an act entitled "An act for the encouragement of forestry," which became a law without the Governor's signature on March 8th, 1899, and printed at page 570 of the published acts of that year.

(H. 246. Approved February 27, 1905.)

Forestry—Setting Fire to Woods—Penalty—Prosecutor

Section 1. Be it enacted by the general assembly of the state of Indiana, That any person who shall set fire to any woods belonging to another or shall place a fire on his own property and permit it to spread to the woods of another shall be liable to a fine of not less than \$5.00 or more than \$50.00, and, furthermore, shall be liable to the owner or owners for the full damages sustained by reason thereof, and it shall be the duty of the prosecuting attorney of the county to faithfully investigate and prosecute each and every case, and any failure to so do by him shall be sufficient evidence for his removal from office, and his bondsmen shall become liable for the full damage hereof sustained.

Road Supervisor—Duty as to Fire

Sec. 2. It shall be the duty of the township road supervisor when any woods, as in section 1, shall become on fire in his road district to employ such help as he may need to extinguish such fire, and himself and such help as he employs shall be paid by the township trustee from the general expense funds of the township at the rate of \$1.50 per day for the time actually occupied in extinguishing such fire.

Repeal

Section 3. That an act entitled "An act for the encouragement of forestry," which became a law without the Governor's signature March 8, 1899, and printed at page 570 of the published acts of that year, be and the same is hereby repealed.

* From Report of Secretary of the State Board of Forestry.

The beneficial elements of this law compared with those of other states may be stated here briefly. This law puts the subject directly up against the people, and provides a fire warden in immediate reach. Every road supervisor is made a fire warden for his own road district and he can only draw pay when duty is performed. If a woods becomes on fire and he should summon the citizens to extinguish it they are paid a per diem also. A failure to perform duty calls for the prosecutor to act or he is subject to dismissal from office. The expenses of extinguishing forest fires shall be paid by the township trustee from the general funds of the township. Thus the citizens of each township are made to bear the burden of their own forest fires.

When the citizens are compelled to stand the burden of a few forest fires and the township trustee finds his general funds expended for the conduct of some reckless individual, an effort will then be made to apprehend the guilty person and make him suffer the consequences of his act. It is the close contact of this law to the people that will make it effective. It has been no uncommon thing in past years for reckless hunters or other reckless individuals to set fire to a woods, and the owner paid no attention to it, or if he did he must fight it at his own expense and bear all the damage. The individual who wilfully or by his neglect causes a fire to a timberland is just as guilty and has just as much cause to be amenable as he who sets fire to house or barn.

The simplicity of the law will undoubtedly make it effective. No high-salaried fire wardenships are created. The idea of state fire wardens located at the capital and detailed by the department to the scenes of fire, as is the case in other states, could not do the good that will result from the small army of road supervisors stationed in every community in the state and immediately available in case of fire. A fire warden should fight fire instead of being merely an agent to ascertain the probable cause and report upon the damage done.

The board will be only too glad to help execute this law and will appreciate the information of any failures on the part of officers to do their duty.

The birds reported upon the Reservation between the dates of June 20th and July 12th, following:

Flicker (Yellow Hammer).	Bank Swallow.
Downy Woodpecker.	King Bird.
Red-head Woodpecker.	Butcher Bird or Shrike.
Hairy Woodpecker.	Chickadee.
English Sparrow.	Crested Flycatcher.
Field Sparrow.	Blue Bird.
Chipping Sparrow.	Indigo Bird.
Ground Sparrow.	Whip-poor-will.
Song Sparrow.	Mourning Dove.
Fox Sparrow.	Schytepoke, or Thunder Pumper.
Tree Sparrow.	Red-eyed Vireo.
Grass Sparrow.	Belted Kingfisher.
Vesper Sparrow.	Peter Bird.
Meadow Lark.	Golden-crowned Kinglet.
Little Meadow Lark.	Ruby-crowned Kinglet.
Marsh Robin.	Goldfinches.
American Robin.	Yellow-breasted Chat.
Blue Jay.	Pewee.
Catbird.	Sapsuckers.
Brown Thrasher.	Nuthatches.
Wood Thrush.	Humming Birds (2 varieties).
Cardinal.	Quail.
Black-poll Warbler.	Common Pheasant.
Magnolia Warbler.	Mongolian Pheasant.
Yellow Warbler.	Partridge.
Carolina Warbler.	Grouse (few).
Maryland Warbler.	Wild Turkey (very few).
Cerulean Warbler.	Red-shouldered Hawk.
Pine Warbler.	Cooper's Hawk.
Long-tailed Wren.	Sparrow Hawk.
Short-tailed Wren.	Crow.
Bewick's Wren.	Red-winged Blackbird.
Cherry Bird.	Screech Owls (2 varieties).
Cedar Bird.	Great Owl.
Barn Swallow.	



Kellogg

"In a most picturesque spot I found the home of a flicker in an ivy-covered stub"

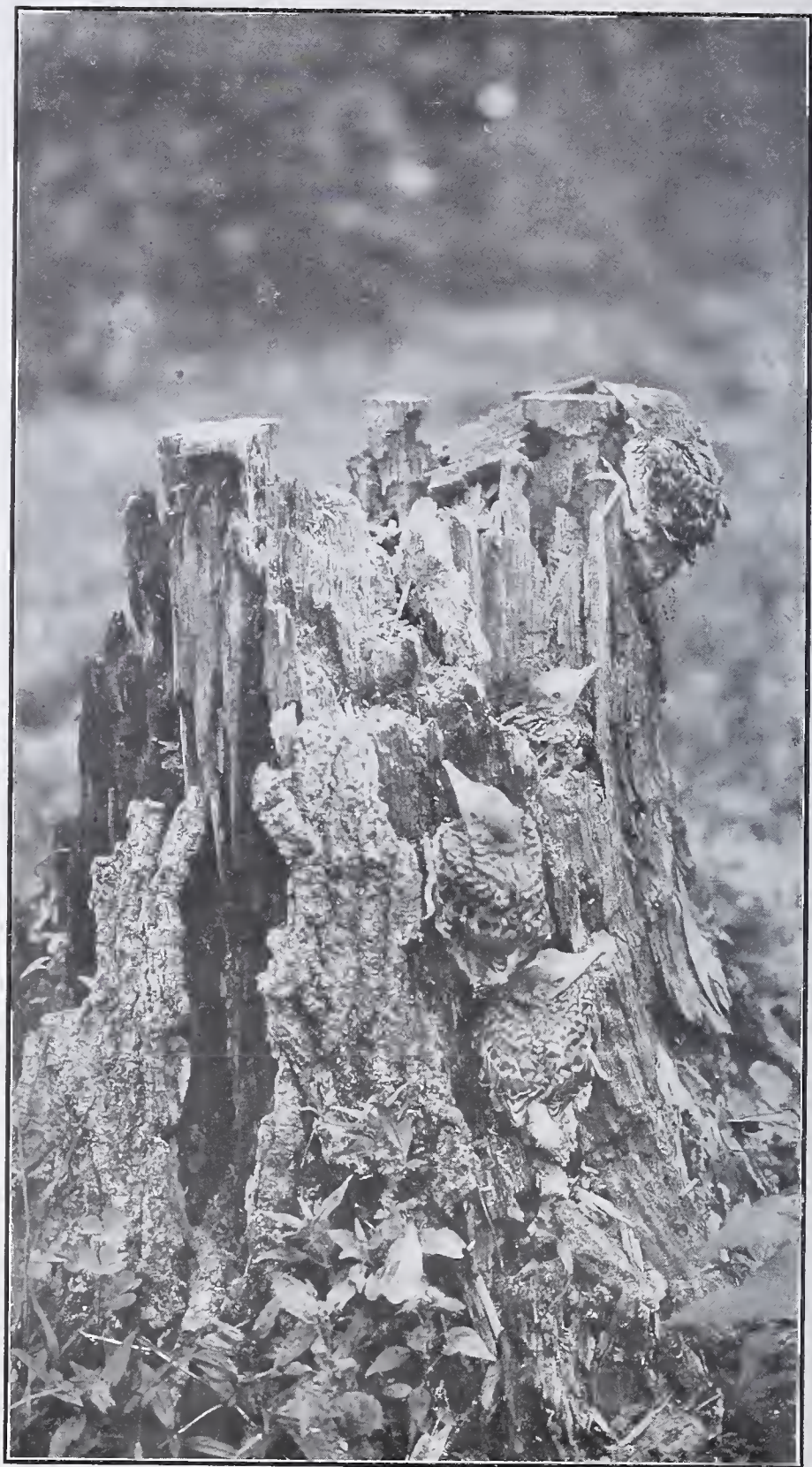
A Few Hours With the Wild Birds

DR. HIRAM W. KELLOGG, PRESIDENT
INDIANA AUDUBON SOCIETY

A busy life need not preclude companionship with birds. The "interurbans" take you in a few minutes to the country and an hour's tramp through the fields and woodlands brings you to many pleasant experiences. To be sure, if you are familiar with the country around your town and by frequent expeditions you know the places sought by bird life, you have advantage if your time be limited for this single day.

It was in June, the month for young birds, that I set forth with my camera for a bird hunt. I had located on a former occasion a swamp which I suspected to be favorable to bird-nesting. This swamp was not large, covering only a few acres of land, but birds are fond of water.

After leaving the car, I passed through a small piece of timber and in a most picturesque spot found the home of a flicker in an ivy-covered stub. How the birds choose the beautiful! I knocked at the door and at once received a response from the family, although the parents were away at the time. Such a chattering and screeching you never heard! It was all in a foreign tongue and I was suspicious it was not a welcome, but I concluded that the little ones did not fully appreciate the opportunity for renown that had come to them. They might now become famous and be known to every boy and girl in Indiana. Did they but understand it they would have invited me in. Without much difficulty, by the aid of a few crotched limbs of dead trees near by, I ascended to the nest, which was about twelve feet from the ground. With a small saw, which I always carry as a part of my bird tool equipment, I enlarged the door of the house so as to insert my hand and reach the little ones. This I did with great care and with much patience, for they have ways of bracing themselves and clinging with their feet that defies the strength of man. One by one I placed them in my side pockets and descended. On a stump near by they braced themselves and posed in a most natural way for a picture. They seemed to enjoy their first outing as a boy enjoys a picnic. The young flicker is not a cross or quarrelsome fellow, as some other birds I know, but he is not so kind to his brothers



“On a stump nearby they braced themselves”

Kellogg

and sisters as he might be. It is amusing to watch their cunning, awkward ways. Long necks and long legs and clothed for summer weather—not much on yet! But the picture is before you, and you can see them for yourselves. After placing them safely in the nest and saying goodby, I proceeded a few rods to the swamp—my objective point.

The red-winged blackbirds were in their glory. The swamp is full of tall rushes and flags—a paradise for the red wings. I had provided myself with high rubber boots and found them necessary. I began an exploit for discovery and in a few minutes had located fourteen red-wings' nests, in every stage of bird development, from queerly marked eggs, to the young, ready to fly. See cuts on pages 34, 35, 36 and 37. I became busy at once, for my time was limited. I took pictures of the nests in all stages and of the young. The old birds were a little disturbed at first and circled around me and talked to me in terms that I knew were not very complimentary. But when they saw I was not bent on mischief they became friendly, while their children looked pleasant.

Had my hour of recreation closed then it would have been rich in pleasure, but the excitement was beginning. As I came from the water, a rush of wings, too near, made me start, but I knew that some nest was there. On examining the bushes near by I



My companion of the woods

Kellogg

found a poorly built nest with four eggs of various shades of blue, no two exactly the same color. It proved to be that of a black-billed cuckoo. It was near the ground, and I took, with ease, a picture of the pretty bird home. In a few days I made a special trip to take another of the young birds. They were the strangest looking things I ever saw. Covered with coarse something that looked more like quills than feathers. The old bird did not appear during all of this picturing, but I suppose would be gratified if she knew that her little ones were to be shown to so many people.

As I sat resting for a few minutes, for the rush had been fatiguing, I observed in the midst of the swamp, perched on the top of a bush, a kingbird, sitting just as they do when watching their nests. I have seen them in tops of trees, but never in low bushes. On examination I found three little "kings and queens" just ready to venture out into the great mysterious world. They had not yet tried their wings, but a little disturbance aroused them, and, climbing above their nest, they took a position that an artist might grow excited to see. I then added to my choice list, the kingbirds. Like all the other youngsters in the list, they show the exact form and semblance to the old birds. One little fellow had been fed but a few minutes before, and had not swallowed all the swamp insects the mother had put in his mouth, and as he opened it to fight his companion the insects appeared in the mouth, and may be seen if you look carefully.

I thought my day of sport was over and started home, but at my feet I flushed a small bird from a low bush, and found the nest of a vesper sparrow. In the neatly hair-lined nest were three speckled eggs of the sparrow and one larger one of the cowbird. This singular bird is a tramp—never has a home of its own, but occupies that of some other smaller bird. Its egg is laid and the little one is hatched and reared by a stranger, and for all the pains and labor no thanks are given. This is indeed a lazy life and ought to be stopped, but it has been going on so long that it is sanctioned by custom in the bird world, and it will no doubt continue.

But the delights of the day were not yet over. In a wild rose bush, full of sweet blossoms, hid away in a secret place, I found the home of a song sparrow. Three little eggs and one small bird that had just appeared on this earthly scene greeted my eye. I wonder if this little bird knew how beautiful was its dooryard! I wonder if it was the happier because most sweet roses grew to

the very threshold of its house! Was this the reason why its song was so cheering? Do birds love flowers as we do? Surely the lovely places they choose seem to speak for their taste and the joy of their associations.

Well, I went home. I had spent but a few hours away from the rushing city, had been refreshed by my walk and the breath of fresh air, and charmed and delighted by association with the beautiful of nature and songs of birds. It was the breaking out of a spring of water in a desert, the coming of the sunshine into a gloomy day. I was happy, and what is better, I felt that my joy was one that could be shared with all the children of our great and noble state. They could see what I saw and in a measure enjoy what I had enjoyed.

This is but one tramp. I have made many that have yielded great pleasure. Once I found a mourning dove's nest in a low bush and took a picture of the birds, in nest and hand. An indigo bird, blue as if he had been soaked in indigo for a year, flew up at my feet, and, pushing back the bushes, I found a most beautiful nest with pure white eggs.

We need not always go to the woods far away. Birds come to our very door. A hummingbird built under our window in the rose bush, and its nest and all was not so large as a rose.

Last year a friend telephoned me from his business office to come down into town, and when I got there what do you suppose he had for me? A nest of nighthawks on the top of one of the high buildings in the very heart of the city. Queer, you say, but true; they had chosen this strange place and we took pictures of them.



A red-wing's nest "with queerly marked eggs"





"A paradise for the red-wing"

Kellogg



“ While their children looked pleasant ”



"A poorly built nest with four eggs"



"The strangest looking things I ever saw

Kellogg



An unusual home for the kingbird

Keilogg





Kellogg

"Three speckled eggs of the vesper sparrow and one larger one of the cow bird"



Kellogg

A most beautiful nest of pure white eggs



The beautiful rose-bowered home of a song sparrow

Kellogg



Kellogg

Young doves





Kellogg

Doves



Nest and birds together were not so large as the rose

Kellogg



Kellogg

Night hawks in the very heart of the city



Night hawk

Kellogg

Bird Food

SUPERINTENDENT W. B. WILSON, FRANKLIN

One who would be intelligent in his treatment of the wild animal life about him must be familiar with the feeding habits of the various species of this life. Just as one cannot determine his attitude upon a political proposition until he decides its effect upon the welfare of society in general and upon himself in particular, so one cannot understandingly inaugurate a line of conduct toward a species of wild animal until he is familiar in detail with the main diet of the species. It is mainly through what an animal eats that it hinders or promotes man's welfare.

According as a species of birds eats and behaves itself eating, therefore shall its chances for survival be so far as man's decrees are concerned. If the main diet of a species of bird is animal life, it may easily be set down at once that this bird is man's friend and helper, for what animal food that a bird can eat does man care for either for feeding or commercial purposes? A bird eating animal food is not a factor operating against man's interest except it consumes a species of insect which is the natural enemy of another insect which is man's enemy. For example, the fluted scale and the San Jose scale are very destructive to certain plants which man grows for commercial purposes. Man is, therefore, interested in accomplishing their destruction in all possible ways. Their natural enemies are certain minute, parasitic flies and lady beetles. Should a species of bird, living on animal life mainly, prefer lady beetles as its food, it might become a factor destructive of man's interest, although it consumes no food which man desires for commercial or feeding purposes.

A species of bird that lives mainly on a vegetable diet is usually man's enemy to the extent that its feeding habits operate. The catbird, bluejay, bobolink and English sparrow, for example, subsist mainly upon a vegetable diet, as may be seen by reference to the charts below, and as may be verified by reference to the very accurately prepared bulletins, issued gratuitously, of the United States Department of Agriculture. In Indiana, however, the bluejay and the bobolink can scarcely be regarded as negative factors from man's point of view, for the vegetable food they eat with us is not cultivated fruit or grain. The same is true of the catbird so far as the food he consumes is concerned, but he is an

enemy to man in that he is a disturber of the nests of other species of birds which are man's greatest helpers. The English sparrow is probably man's worst bird enemy. It consumes cultivated fruit and grain, having attacked gardens, orchards, vineyards and grain fields in a most destructive manner. These habits could be tolerated, however, if it were not that it adds to them a worse one, that of preying upon, pestering and driving out our other native birds, which man so much needs the aid of in keeping down the insect pests. The sparrows consume the food provided for other birds, they usurp the bathing and nesting places, and they mob other birds, tearing up their nests and destroying their eggs. In view of these habits of the English sparrow, it is not surprising, therefore, that insect scourges occur wherever the sparrows are numerous. Where the sparrow rules and reigns, it may be expected that his course of destruction will be paralleled by the ravages of the gypsy moth, the elm beetle and many varieties of destructive caterpillar, for their natural enemies were driven out when the sparrows routed the native birds.

In light of the above, it is clear, therefore, that a species of bird is helpful or harmful from man's point of view, (1) according to what it actually eats, (2) according to the feeding habits of what it eats in case its diet is animal food, and (3) according as its fighting and quarreling habits affect man's interests. These principles of judging a species of bird render it comparatively easy to take the data regarding our native birds, which has been prepared for our guidance by the most capable experts that the United States Government can employ, and determine what should be our attitude toward each species of them. These data are not based upon hearsay nor casual observation; they have been derived from an examination of the contents of the stomachs of many birds of each species killed at all times of the year in all parts of the territory where a given species ranges and under as great a variety of feeding conditions as possible. Feeding tests have also been conducted upon caged birds of the various species, the tests being varied sufficiently to determine definitely the feeding habits of the bird under study.

The results of these tests have been issued from time to time by the Agricultural Department of the Government in the form of bulletins. The government is glad to distribute this information free of charge to any one who will ask for it. A postal card addressed to the United States Department of Agriculture, Washington, D. C., requesting copies of the bulletins pertaining to our

FOOD CHART OF OUR COMMON BIRDS.

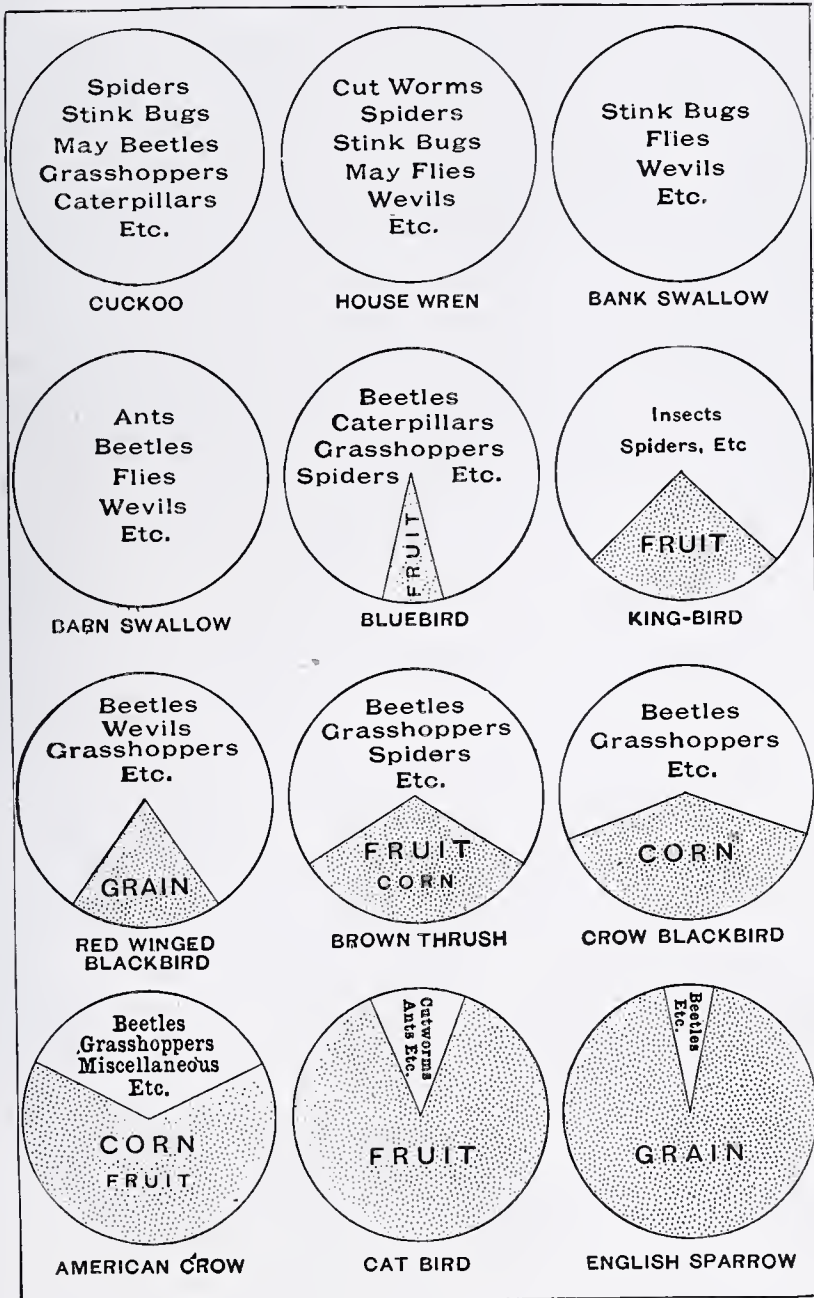
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FIGURES in all cases express percentages of the food indicated obtained from analysis of stomach contents. CROSSES indicate that the particular food forms a part of the bird's diet.

Rice.
Green Peas.

native birds will bring the most reliable information available. Many of these bulletins are beautifully illustrated.

The food chart on preceding page was prepared mainly from data gleaned from these government reports by Miss Helen A. Ball. It is quoted here from Dr. C. F. Hodge's leaflet on "Our Common Birds."



Food of some common birds.

The same facts regarding twelve common species of native birds have been graphically expressed on page 149 in Goff and Wagner's "First Principles of Agriculture." (See preceding page.)

It would be relatively easy to extend this article to any length if I should take up a consideration of the food of each of the species of our common birds. To do this would be to quote from the literature to which reference is made above. This would cheapen the data unless I quoted it very fully. I shall, therefore, leave the reader to read the bulletins at first hand instead of attempting a rehash of any portion of it.

The truth regarding the habits of our more common birds should be widely disseminated through the press, the schools and various public agencies. The outcome will be a more enlightened public and a more intelligent and widespread response on the part of citizens in aiding in the attraction and protection of our helpful birds. United effort along a few creative lines will speedily do much to increase the number of birds of desirable species and to reduce the number of undesirable birds.

Nesting-Boxes*

EDWARD HOWE FORBUSH

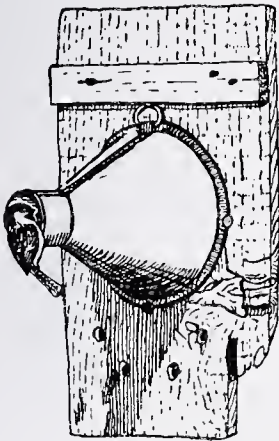
Illustrated by the Author

There is no better way to attract and protect several species of useful birds than to put up nesting-boxes. Every family, rich or poor, that lives in the country, can provide them. Old worn or waste materials may be used if others cannot be procured; for the birds seem to prefer weather-beaten lumber or rusty metal to that which is new, bright or painted.

Among my early recollections there comes to mind an old, unpainted, weather-beaten New England farmhouse, the home of a poor farmer with many children. It stood in the shade of a giant elm by the roadside, and high up the rugged trunk of the old tree another home, a box made of ancient shingles weather-stained and moss-grown, was occupied by a family of bluebirds. I noted every detail of their airy castle, and on returning home secured four old shingles and a piece of board from amongst the kindling wood, and with a hatchet and saw a rough box, like the accompanying cut, was made and put up in one of our cherry trees.



THE SHINGLE BOX



A NEW USE FOR AN
OLD FUNNEL

Soon a pair of bluebirds came, and after that many pairs nested in such boxes. The shingle box answers its purpose fairly well if put up against the side of a building, or on a tall pole or tree trunk, where the cat is not likely to climb. Any small box will do, if it is nearly the right size and shape, but it will be better to have a piece of thin board or shingle nailed flat on the top and projecting a little on all sides to make the roof tight and shed the rain. If the board projects

* From *Bird-Lore*, the official organ of the Audubon Societies. This is an illustrated magazine devoted to the study and protection of Birds. Published at 66 Fifth Avenue, New York City.

well out over the entrance hole, it will keep the rain from driving in. In Massachusetts, where my experiments have been made, it is best to have the entrance to the box face west. Those who cannot conveniently make or purchase boxes may use tomato cans, old



HOLLOW LIMB BOX

tinware, such as milk-cans, funnels, pails, coffee-pots or teapots. The worn out funnel nailed to a piece of old board serves to show one way in which such contrivances may be put up. The board may be nailed or screwed to a tree or the side of a barn.

I have seen a barn swallow's nest built in a lard pail which was used to stop a stovepipe hole in the chimney of a deserted house. If old tinware is used, it is best to have it in trees where, being shaded by the leaves, it will not be heated by the sun's rays. There should be a few small holes in the bottom of each pot or can, so that, should the rain happen to drive in, it may run out. There never should be an uncovered hole in the top. If a lard pail is used, it must have a cover to keep out the rain, and a hole must be cut in one side for an entrance. Tree pruning is a chief cause of the scarcity of certain birds in some localities. When hollow limbs are cut off they may be cut up into sections and each section roofed, bored and mounted in such a way as to make two or more nesting places out of one.

A handsome and durable box may be made of bark. This style of box is one of Mr. William Brewster's ingenious inventions, and yet is untried; but I have made a considerable number of them and see no reason why they will not be serviceable. Old tin utensils may be useful to the farmer to put up in his orchard, but they are not ornamental and should be placed in trees where they will be hidden by the foliage; but the bark box is novel, useful, neat, and also decorative in a rustic way.

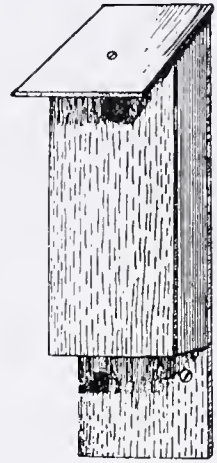
The birch boxes must be made late in June, when the bark will peel readily. A small tree can be cut down and cut into sections long enough for boxes. Each box is made by peeling off both outer and inner bark, then sawing a slice off each end of the stick for the bottom and

THE BIRCH
BARK BOX

top, tacking the bark on the ends, nailing on the supporting stick, and the covering the top with the green bark from a young pine, to make it water-tight.

These small boxes are suitable for the chickadee. The bark of the chestnut makes strong and durable boxes, which may be covered or roofed with zinc, for the larger birds.

The cat and the English sparrow are the chief enemies of the native birds about our villages and cities. An objection to many bird-houses is that they are not cat-proof. When my first shingle box had been up three or four weeks the family cat was found, one day, hanging on it and clawing out the young birds. Later a box which seemed to be cat-proof was devised for bluebirds. It was very deep with an overhanging cover or roof, no perch, and the entrance hole well up under the eaves. This makes it difficult, if not impossible, for the cat to hang on and reach the nest. The young birds find it rather hard to get out of such a box at first. They have to make many attempts, and when they finally escape they are quite strong and less likely to be caught by cats than they would be if reared in a box from which they could get out before they were fully fledged.



BOX FOR BLUEBIRDS
OR CHICKADEES



TREE SWALLOWS BOX

The ordinary small birdhouse that is put up for martins or tree swallows must be set on a tall, slim pole, to give the birds a degree of immunity from the cat. These birds usually seem to prefer a house elevated from fifteen to thirty feet from the ground on such a pole. Ordinarily, the entrance holes are made too near the bottom or floor, and the young birds, being nearly on a level with the doorway, are sometimes pushed out or fall out in their eagerness for food, and so become the prey of the prowling cat.

In building martin boxes this danger may be partially guarded against by having a little platform around each story, and a railing not less than three or four inches in height around the platform.

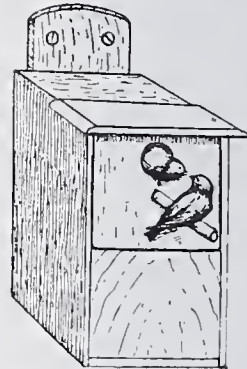
The shape and size of the bird-boxes must be regulated by the sizes and habits of the birds for which they are intended. It is better to have them comfortably large than too small, for this gives the

birds more room and air. In my experience, when birds have their choice, the long, deep boxes placed rather low are more likely to be occupied by the bluebirds, chickadees and wrens, than are the square boxes or birdhouses, especially if they are raised high in the air on poles.

While the exact size of the box is rather immaterial, the size of the entrance hole is most important. This should be just large enough to admit the desired tenant, and small enough to keep out all larger birds. A diameter of one and seven-eighths of an inch will do for wrens, one and one-fourth inches for chickadees, one and one-half inches for bluebirds or swallows, two and one-half inches for martins, and three and one-half inches for flickers and screech owls. By observing this simple rule about the size of the doorway, it sometimes is possible to have several species nesting amicably within a small area.

Martins, breeding as they do in large communities, are particularly subject to parasites and other adverse influences. Nearly all the martins in Massachusetts seem to have succumbed to the cold rain storms of June, 1903. They were then decimated throughout most of southern New England. It seems probable that the only hope of their soon recovering their foothold there lies in putting up more martin boxes and thoroughly cleaning out those now filled with dead martins or with English sparrows' nests. In a few cases in southern Maine where this was done martins bred during the past season. Elsewhere in the same towns there were no martins.

One of the most important questions asked by those who are putting up birdhouses is, "How shall we get rid of the English sparrow?" The sparrows are kept away from my bird boxes by the use of a gun loaded with small charges of powder and dust shot. They have so well learned their lesson that there has been no necessity for shooting any for two years. Where these birds are plenty, however, continuous shooting may be necessary. I have never had any success in putting up boxes hung so as to swing by a wire. The sparrows do not nest in them, but neither do other birds; nevertheless, some of my correspondents have known both bluebirds and tree swallows to nest in these boxes. This is only one of the numerous instances that teach one that his own experience alone is never an infallible guide. Those who are



BOX WITH SLIDING COVER

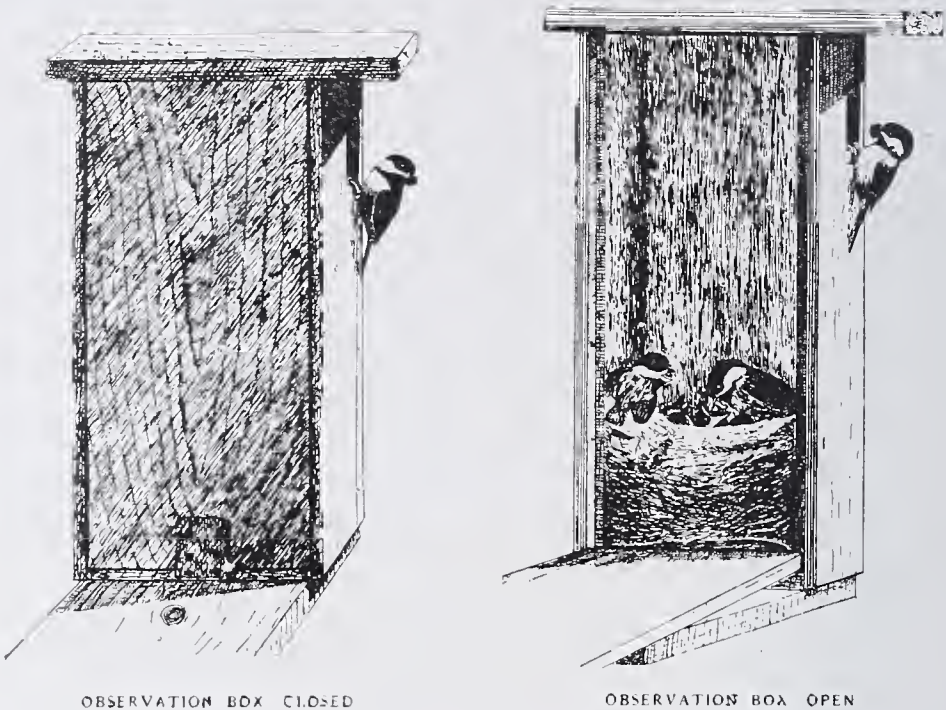
much troubled by the sparrow may find the swinging boxes worth trying.

Little reliance can be placed on boxes without a perch, for a sparrow is likely to get into any hole that any other bird of its size can enter. Mrs. Mary R. Stanley suggests the use of martin boxes without a perch and with the entrance underneath. I have had no experience with such houses.

Every small nesting-box should be provided with a cover or door, by which it can be opened and the contents removed. This is always practicable, except perhaps with large martin boxes, which should have entrance holes large enough so that the rooms can be cleaned out through them. A box which can be opened provides a way to get rid of the sparrows. Their eggs can be removed every week until they tire of laying and leave the locality, or their nests can be destroyed with little trouble. There need be no sentiment about destroying these unfortunate little pests. Squirrels and mice often occupy these boxes, and their nests must be removed unless we prefer them to the birds. All the boxes mentioned above provide for this, except the shingle and bark boxes, which, however, can easily be made to open. The box shown in the cut above is the most convenient of all, where English sparrows are plenty. The door extends half way down the front and is attached to a narrow cover which overlaps a part of the top of the box. This arrangement needs no locking so long as it is not meddled with by children, and can be taken out in an instant without disturbing the nest, leaving an opening large enough to put in the hand and remove the contents of the box at once.

For those who wish to study the habits of such birds as can be induced to nest in boxes, the observation box shown in the cut is very nearly perfect. More than thirty years ago I made the first one for the purpose of studying the domestic economy of a pair of bluebirds. It is a simple affair with one side rabbeted for a pane of glass, and a door which shuts over the glass. The door is kept closed most of the time until the young are hatched. It can then be kept open as much as seems desirable, to observe the habits of the birds through the glass; but it must be arranged so that the sun will not shine in it, as that might be fatal to the young birds. The box shown in the cut is mounted on a short board projecting from my window sill. The door is hinged at the bottom by a piece of leather, and opens toward the window. It has been occupied for three seasons by chickadees, and any one sitting at the open window can watch the young birds as they are fed, note their

growth and development, the character and amount of their food, the nest-cleaning and all their household affairs. The old birds were first attracted to the windows by feeding them there. Then



they found the box a good place for shelter, and finally nested in it. They are good neighbors, attending to their own business and, as unpaid laborers in our fruit trees and woodland, their work of clearing insects from the premises is of the utmost value.

Words from Teachers and Pupils in the Indianapolis Public Schools

We at No. 38 are so fortunately situated as to be able almost daily to observe the various spring birds—their colors, habits, songs and a number of nests. Even during the memorable snow-storm, we threw bread crumbs out to a forlorn sapsucker who was hunting for comfort under the eaves over our schoolroom window. Orioles and bluejays are observed in the trees near our windows, so close it seems we could almost touch them, while a “bird battle” over a nest patiently hammered out by a sapsucker in a tree in the yard was watched with more interest than I can describe. This battle, I forgot to say, was between sparrows who had driven away the aforesaid sapsucker and some red-headed woodpeckers, who in their turn drove away the sparrows and are now in full possession.

Our special study, however, is the Baltimore oriole (that beauty!) The bird was introduced by means of colored pictures, to have the pupils prepared for its recognition when it at last arrived. The children are watching and reporting from day to day the various developments as to nests, time required, materials. I have promised to visit at least one home near which orioles are making a nest.

A TEACHER.

Indianapolis, Ind.

Early in February we heard the song sparrow and meadow lark. The children have been encouraged to watch for the arrival of birds, their habits, meeting places, etc. Many interesting incidents connected with the individual observations have been related each week. Our imitations of the calls have not been very successful yet, owing to the timidity of the children.

During one of the heavy March snow storms the children were greatly interested in watching a bluejay closely hugging the trunk of a tree, opposite the school window, in his attempt to keep on the side away from the storm. In the yard there is a scrubby oak tree with a hole near the top in which a woodpecker had his nest last year. This year a sapsucker took possession of the hole and worked with all his might to make it larger. He didn't mind it a bit because all the schools went out to watch him, as he braced his stiff tail and pounded with his long, slender bill, until we could

hear the taps distinetly. Then he would go inside the hole and throw out chips, some of which measured more than a half inch in width. The sparrows finally drove him away and the woodpeckers then returned, only to be attacked by the sparrows. Last week the sapsucker came back and a battle began which seems impossible to settle.

We have watched a downy woodpecker which comes almost every day to the hickory tree outside our window. We suppose he is after insects.

In the yard at reecess the boys had quite a time today trying to protect a young bird just learning to fly.

My object has been not a seientifie study of birds, but to give the children a genuine love for and interest in the little creatures.

We watched a hickory tree outside the window as its buds grew larger and larger until they burst into leaves. An ash outside another window furnished a great deal of pleasure with its queer blossoms.

A trip was made last week to visit the row of sycamore trees in the neighborhood and some definite work was done. As we sat on a hillside working an oriole came to the tree, called and flitted from branch to branch to show his colors. A robin sat on her nest in the tree directly over our heads, much to the delight of the children.

A TEACHER.

Indianapolis, Ind.

The three following articles are from pupils of the Audubon school, Indianapolis.

The Crow

PAUL KNOWLES

The crow that I saw in the woods was a large blaek bird. I saw him flying around a large walnut tree. I went up to the tree and saw a small baby crow lying on the ground. I pieked it up, and about the time I had it in my hands the mother bird flew down and peeked me on the head. I let go and ran away and hid behind a tree.

In a little bit I saw the mother and father fly down on the ground by the young crow. Then they picked up a stiek in their claws and let the young one get on it, then they flew up to the nest, and that was the last I saw of the birds.

Birds I Have Seen

ANNA ELIZABETH JUNGE

Grade 5 B. Age 9 years

As we live in the country, I have a good opportunity to watch the birds. It seems as though orioles like something about grapes, because one visits our grape arbor every morning.

A wren has her nest in a gourd which my father put up in a large hackberry tree. The little wren enters the gourd by the handle, for there the hole is so tiny that the English sparrows cannot get in to bother her.

A catbird and a brown thrasher come every day to the shrubbery which is close by our house.

I think that a meadow lark has her nest in the pasture in the tall grass, because I see her flying to and fro so much.

My father has put a large box, which we call "the flat," on a high pole above our chicken house, for the purple martins. This box has eight separate parts in it. Purple martins never quarrel and like to have their nests close by each other. This year they came and looked at their house and made a great noise, but went away again and have not come back. Perhaps they did not like it because the sparrows lived in their house during the winter.

Besides these birds, I have seen the bluebird, bluejay, kingbird, blackbird, wild canary, kingfisher, robin, yellowhammer, red-headed woodpecker, downy woodpecker and song sparrow.

The Bluebird

GLADYS HUGHES

Grade 5 B. Age 10 years

The bluebird is always welcomed very gladly when he comes back early in the spring. This bird is often called the banner-bearer of birdland, because he wears the colors of the American flag. He wears the blue on his wings, head and tail, the red on his throat, and the white on his breast. The red is not a bright red like our new flag, but more like the flag that has gone through the war.

The bluebird is not so large as the robin, but larger than the English sparrow. This gentle bird is loved by every one, espe-

cially by the farmer, because he gets the caterpillars and other harmful insects from the trees, and he gets the harmful beetles, crickets and grasshoppers from the ground. This bird does not eat the cultivated fruit, but he eats only a small amount of wild fruit, which he deserves. The bluebird is very dainty about his eating. He does not eat on the ground like most birds, but flies down to the ground, gets an insect and then flies back to some high place to eat.

This bird is a very friendly bird, and we like to have him build near us because he is useful. He likes a sheltered place to build his nest. We can help him by putting a box out and cutting a small opening in it so he can get in and out.

The bluebirds build their nest of plant fibers, dried grass and a few feathers. After the nest is finished the mate lays about four sky-blue eggs spotted with red. When the eggs are hatched and the birdlings are in the nest, the mother and father birds are kept busy finding food, and that is the time when the bluebirds are the most useful, and when we like to have them with us.

The Redstarts' Honeymoon*

Mr. and Mrs. Redstart had built a home at Heilbronn, Germany. They had woven the straws and grasses in, one by one. They were proud and happy when at last the little nest was done.

Mrs. Redstart had just sat down on the nest to see how she liked it when—what do you suppose happened? The nest began to move. The ledge near by on which Mr. Redstart was sitting began to move, too. In fact, the whole little building, in which they thought they were so safe, was hurrying down hill, as if it would never stop.

Mrs. Redstart lifted her wings and cried in fright, "What has happened? What shall we do?"

"Don't be afraid," chirped Mr. Redstart. "The nest stays in place and I am near you. We shall soon know what it is that is carrying us off."

But the birds and their nest kept moving, past fields and houses and flower beds. At last Mr. Redstart sang out in a cheerful voice, "Why, Mrs. Redstart, some one has made a great surprise for us. This is a railway car, the one they call the milk train, and we are on our honeymoon, nest and all!"

Mrs. Redstart twittered. "You were right, my dear. There was nothing to be afraid of after all. This motion is really delightful. It is almost as good as being on the wing."

By and by the car stopped. "This is what I was waiting for," said Mr. Redstart. "I will fly out now and get something to eat. I am really quite hungry, and you must be, too."

Out he went and was soon in again with a fat kernel of corn. Then the train started. But Mr. Redstart had had enough of railway travel for a while. He was glad to try his wings, and darted off again. Mrs. Redstart fluttered and cried and Mr. Redstart came flying in at the open door, just to show her how easily he could do it.

The Redstarts' life seemed likely to be one long honeymoon, and they made up their minds to enjoy it.

At one place the train stopped two hours. Here Mr. Redstart always brought in a good dinner to his mate. Sometimes he teased her by staying away until the train started. Then he would come flying after.

* From the *Little Chronicle*.

But one day he stayed too long. When he came back to the station the train was gone and even the smoke was out of sight. He flew along the track as fast as he could go. Ah, there was the smoke of the engine, going through the woods. He must catch it. The train stopped and in a minute Mr. Redstart fell, almost out of breath, on the car floor.

Mrs. Redstart had been frightened and vexed, but when she saw how tired and sorry Mr. Redstart was, she twittered her softest notes and only said she was so glad he was back safe.

Now when the milk train makes its two-hours' stop each day Mr. Redstart goes out for dinner. What the train men wonder is, how he manages to get back each time just one minute before the train starts.

Bird Stories From the Poets*

ELEANOR M. JOLLIE

BIRDS OF KILLINGWORTH

It was spring. Already the little buds, which had been asleep all winter, were beginning to grow. Indeed, some of the buds were already awake. There was Pussy Willow, in her soft gray hood, blinking her sleepy eyes at Miss Snowdrop.

The little brook was singing happy songs as it danced through the meadow.

"Wake, up, wake up," it called to the violets on its banks. "Spring is here," and it ran on to awaken the ferns. It was a busy little brook, for it had much work to do.

Some of the birds had already come back from their winter homes in the Southland. There were the swallows looking very fine indeed in their brown traveling suits.

"How pretty you look," the swallows had said to the orioles. "You are very gay in your black and orange."

Everyone had liked the funny little hats of the bluejays.

Of course,

"The robin and the bluebird piping loud,
Filled all the blossoming orchards with their glee."

And the crows! They flew around saying, "caw, caw," which means, "We hope corn will be plenty this year," to every bird they met. It would have made you laugh to see them, so solemn did they look in their black suits.

How they seemed to laugh and quarrel and chatter, those birds which came to the little town of Killingworth in the bright spring-time!

"The people will be glad to see us," they said. And they sang happily as they built their little homes in the trees.

But the farmers who were working in the fields were not glad. When they heard the cawing of the crows they were angry. "So they are around again, those noisy crows that steal our corn," said one.

"They only laugh at the scarecrows," said another.

"I wish we could do something to destroy all of the birds," said a third.

* Published by the World's Events Publishing Company, Dansville, N. Y.

"There is but one thing to do, we will call a town meeting and see what can be done. We can stand the birds no longer."

So a town meeting was called.

Let us peep into the meeting and see who is there and what they are doing.

There on the platform sits the squire who lives in that beautiful white house. Very important he looks, too.

The gentleman who holds a bunch of lilies is the minister. He has picked the lilies on the way.

There is the teacher who teaches in the schoolhouse on the hill.

See how wise the deacon looks. He is the gentleman in black, with the great white neckcloth.

Many farmers, too, are crowded into the little town meeting house.

Listen to the men as they talk.

Poor birds! And they thought that the people of Killingworth were glad to see them.

"Ill fared it with the birds both great and small,
Hardly a friend in all that crowd they found,
But enemies enough, who everyone
Charged them with all the crimes beneath the sun."

But at that meeting the birds had one good friend. While the others were speaking and thinking of ways to kill the birds, he sat sad and thoughtful. He was sad because he loved the birds and did not want them killed.

When the others had finished speaking, he stood.

"You wish to kill all of the birds," he said.

"Think how they sing to make us happy when we are sad. God sent them to comfort us.

"Think of

"The thrush that carols at the dawn of day,
The oriole in the elm; the noisy jay,
The bluebird balanced on some topmost spray,
Linnet and meadowlark and all the throng
That dwell in nests and have the gift of song."

"You would kill every bird. Why? Just because they take a little grain or a few cherries to eat. And all the time the birds are working for you. They pay well for what they take.

"Think of your woods and orchards without birds
Of empty nests that cling to boughs and beams."

"Would you rather hear the whirl of insects than the song of a lark as you rest at noontime beneath a shady tree?

"You call the birds thieves, but your fields would be badly taken care of without them.

"Who but the birds drive away the insects from the harvest? Even the crows, whom you dislike so much, are good farmers for your corn fields."

The farmers listened, but they laughed. "We must kill the birds," was all they said.

So, day by day, the birds were driven from their homes and killed.

Many little baby birds died, because they had no mothers left to care for them.

The cruel work went on until not a bird was left in Killingworth.

"Now," said the farmers, "we shall have good crops!" But alas!

The summer came. Never before had the days seemed so hot. The grass was yellow and dry.

Hundreds and hundreds of caterpillars, and worms, and bugs, ate the grain and vegetables. Not a leaf was left on tree or bush. No longer could the farmers rest beneath the great shade trees. When the people walked near the trees, worms dropped from the trees onto them.

Then the farmers knew that because they had killed the birds there would be no harvest that year.

How sorry they felt, but it did no good for the birds were dead. They must have wished many times that winter that they had not killed the birds.

One day, the next spring, a strange sight was seen in Killingworth, for a great wagon had been sent into the country, and birds had been collected from everywhere. This is what the people saw:

"A wagon overarched with evergreen,
Upon whose boughs were wicker cages hung,
All full of singing birds came down the street."

Do you think that the music of the birds was sweet to the people of Killingworth?

The wagon was taken to the great square of the town. Then the doors of the cages were opened and out flew the birds. Each bird chose the tree he loved best, and began to build his little home. And never, I am sure, were the songs of the birds sweeter than those which were sung in Killingworth that summer.

THE SCARECROW

One morning in spring a farmer looked at his cherry tree. Every branch was covered with thick buds. "I wish I could cheat the robins," said the farmer. "If some one would only tell me how, how glad I should be.

"I know what I will do," he said after thinking for a little time.

"I'll make a terrible scarecrow grim,
And up in the tree I'll fasten him."

"I think that will frighten them," and he laughed to himself. He worked hard and before long he had made a scarecrow. It looked like a real man in tattered and ragged clothing.

Very early one morning, before even the sun himself was up, the farmer set the scarecrow up in the cherry tree.

Larger and larger grew the buds until one morning the tree awoke to find itself covered with beautiful white blossoms.

"The blossoms were as white as the seafoam light."

The robins, with their bright eyes and heads held aslant, looked at the scarecrow who lived in the cherry tree and said:

"It's very queer that he never moves. No matter how hard it rains or blows he still stands in the cherry tree. He must be a harmless old fellow. Let's all go into the tree together and try to frighten him."

So up they flew and one saucy pair peeped and peeked, but still the scarecrow did not move.

"He won't harm us," said one of the pair. "Let us build our nest in this tree."

And where do you think that they built it?

They built it right in the scarecrow's pocket where no one could see it. What a secret little place that was for a home, was it not?

Before the cherries were ripe a little family was living in that nest.

By the time the cherries were ripe the little birds were ready for them, and how they made the great red cherries disappear.

No one disturbed the birds, for no one knew that they were there.

Don't you think that the farmer often wondered who ate his cherries?

THE EMPEROR'S BIRD'S NEST

It was a dreary day. The rain had been falling and the ground was deep with mud.

The Emperor of Spain, Charles, and his soldiers were in camp. The field looked like a little city with tents for houses.

The emperor and his men had been away from home for a long time. How tired and homesick they were! All the world seemed dark. They missed the blue sky, and bright flowers, and green hills of sunny Spain. But most of all, they missed their little laughing boys and girls.

Back and forth, back and forth, in front of the tents, walked the soldiers in their great boots of Spanish leather.

All at once they saw something that made them start. What do you think that it was? There, on the top of the emperor's tent, was a wee swallow sitting upon her nest. Wasn't that the queerest place in the world to build a nest? Such a carefully made little nest as that was! Mrs. Swallow had worked hard to build her nest. She had made it of clay, and hair, and feathers. Hour after hour she had worked, finding a bit of hair here or a soft feather there and had woven them into her nest.

If she could have spoken to you she would have told you what a good place the hedge had been to find hairs. They had blown and caught there from the horses' manes and tails during the battle.

"Look," said one of the soldiers in his gruff voice, "the swallow thinks that our emperor's tent is a shed."

The emperor hearing his name, came out of his tent to see what the trouble was.

"Let no one touch her," he said as he saw the little bird. "She is my guest," and he smiled.

The soldiers, too, smiled and the day seemed to have grown brighter.

Not a bit afraid was Mrs. Swallow as she sat on her nest, for she knew that no one would harm her. Had not the great Emperor himself called her his guest?

Until the battle was ended, she stayed, and even longer, too, for, as the tents were being taken up for the army to move on, the emperor said, "Leave mine standing."

"So it stood there all alone
Loosely flapping, torn and tattered."

Until the little birds were ready to fly far, far away from home.

THE WOUNDED CURLEW

Near to the great blue sea, among some rocks, a curlew had built its nest.

The curlew was a sober little bird in its dress of brown and gray feathers.

"He is so sad," said the little waves as they put on their little white caps, and danced toward the shore. "Let us try to cheer him up," and they laughed and sparkled, and threw tiny drops of water at him.

"Here is a present for you," said one little wave and it tossed a bright piece of seaweed at the curlew's feet.

The great sun, too, noticed the bird, and sent his children, the sunbeams, down to comfort him.

The blue sky bent lovingly over him, but the little bird was still sad, and day after day limped slowly around, for he was lame.

Sometimes he would wade in the shallow water looking for food, but oftener he would stand on some rocky ledge watching the other birds fly.

Sometimes the other birds would stop for a minute and answer his low cry.

How sad he felt then, for he knew that his wings were broken.

Some little sandpipers lived near the curlew, and they often played beside him as if to comfort him.

Poor little curlew! He had always been such a happy bird until that day, when a boy threw a stone at him and hit him, but now he must forever live alone.

"Oh, bright-eyed boy, was there no better way
A moment's joy to gain
Than to make sorrow that must mar the day
With such despairing pain?"

O children! drop the gun, the cruel stone!
Oh listen to my words,
And hear with me the wounded curlew moan—
Have mercy to the birds."

ROBERT OF LINCOLN

Down among the cotton and rice fields of the sunny Southland lived Mr. Bob-o'-link and his wife. A happy life was his, darting among the orange blossoms, singing for Mrs. Bob-o'-link, or feasting on the plump rice grains, until the little boys and girls of the South called him the rice bird.

But one day, when the sun was unusually hot, he said to his wife, "It's getting very warm here. Suppose we start for the North today, for many of our neighbors are ready to start, and you know that we like company."

Isn't it nice to be able to start on a journey whenever one wishes to, without even a trunk to pack, or a house to close?

And that is how Mr. and Mrs. Bob-o'-link, a short time after, happened to be building a nest in Mr. Parker's meadow.

"We want a pretty place for our home," said Mrs. Bob-o'-link. "Ah! here is just the place," and she stood on an old stone wall looking at a field gay with poppies and clover.

So the wee nest of dried hay was started low down in the grass. Nobody would ever have guessed the nest was there, for it looked like the grass in which it was built.

Indeed, Mrs. Bob-o'-link looked like a bit of dried grass herself, as she hopped about making her little home.

Not so, Mr. Bob-o'-link! He did not need to be hidden, but flew gayly about in his black wedding suit, as gay as—well, as a bob-o'-link should be.

When the nest was finished he had plenty of time to sing and he seemed to say:

"Bob-o'-link, bob-o'-link,
Spink, spank, spink;
* * * *
Chee, chee, chee.

"I have told you my name, but you can't find my nest, not even if you search all day, for it is safely hidden away among the summer flowers."

Mrs. Bob-o'-link was just as quiet as her husband was lively.

Indeed, she looked like a little Quaker wife, in her neat suit of brown, as she brooded in the grass.

"Don't be afraid," said Mr. Bob-o'-link bravely one day, as a boy passed by. "Am I not here to take care of you when thieves and robbers come near?"

Bob-o'-link, bob-o'-link,
Spink, spank, spink,
* * * *
Chee, chee, chee.

And his shy little nun of a wife believed everything he sang to her and felt quite safe on her nest.

Mrs. Bob-o'-link could not sing at all, except for one soft little note, but Mr. Bob-o'-link sang enough for both. He sang as if

his little heart would burst for joy. And why shouldn't he be happy? Were not the flowers and blue sky, the trees, birds, butterflies and the little stream all his friends?

After awhile there was such a sweet secret in the nest in the grass. What do you think it was?

Proud Bob-o'-link could have told you all about six dainty white eggs, flecked with purple, if he had wanted to, but he knew how to keep a secret.

The mother bird sat on her little nest all day, while Bob-o'-link sang with all his might,

"Beb-o'-link, bob-o'-link,
Spink, spank, spink,
My little wife that never goes out
Stays at home while I frolic about.
Chee, chee, chee."

How that little mother bird watched for the eggs to hatch! It seemed a long, long time, but one bright sunny day out peeped six little bob-o'-links.

Then Mr. Bob-o'-link had to bestir himself to get enough seeds to feed the little birds, who seemed all mouths whenever he looked at the nest.

Not much time had he to sing, "Bob-o'-link, bob-o'-link, spink, spank, spink," now.

"Well, well," he said one day while trying to find enough seeds for the little birds.

"I am glad our nest is safely hidden away, and that no one knows where my nestlings lie. I should never have time enough to feed them, and watch for thieves and robbers now."

But the hard work was nearly done, for, one bright sunny day a week or two after the little ones, who had been trying their wings, flew far away from the wee home nest.

"I'm getting to be a hum drum old crone," said Bob-o'-link as he watched the little ones disappear, and then looked at his dingy suit. "I think it is about time for me to go to the land of rice fields and orange blossoms again."

So away he flew to the sunny Southland to rest and enjoy himself until he comes back next year singing:

"Bob-o'-link, bob-o'-link,
Spink, spank, spink,
See what a nice new coat is mine
Sure there was never a bird so fine.
Chee, chee, chee."

THE MAGPIE'S NEST

What would you think if anyone should tell you that in the long ago no bird knew how to build a nest? Would it not seem very queer to think of birds without their little nest homes?

Shall I tell you what bird built the first nest, and how she did it? The bird was the little chattering magpie. She found out the secret of nest building first of all, and such a beautiful nest it was that she made. She took the greenest of moss, the softest of feathers and the cleanest of twigs, with which to make her pretty little home.

When it was finished the wise little magpie was the envy of all the other birds. Her house was round, like a ball, with a little hole at one side for a door.

"I wish I knew how she made her nest," said first one bird and then another.

One day the birds held a meeting in the old oak tree. That tree had seen a hundred years, and was so large that it made the best kind of a meeting place for the birds.

There must have been a great deal of noise in that oak tree, when the birds had all arrived, and it must have been a very pretty sight to have seen them in their best clothes hopping about in the old oak tree.

There were the red birds, looking like great red poppies among the green leaves. The blue birds had on their suits of sky blue. The woodpeckers and bluejays, in their little hats, felt very proud. Many of the birds were just the color of the bark of the trees. Even the owls were there, blinking their great eyes and looking as if they could hardly keep awake.

The birds had so much to talk about that the meeting was quite late in being held, but after a great deal of chattering, it was decided to ask the magpie to tell them how she built her nest.

The little magpie was not only very willing to tell the other birds how to build their nests, but offered to give a little lesson in nest building as well.

The birds all met the next day and when they were all standing in a great circle the magpie began.

"First," said the little teacher, showing them how, "two sticks 'cross each other I lay."

"Caw!" said the crow, in his hoarse voice, "I knew that before," but the magpie only looked at him. The magpie flew away, and soon came back with some moss and straw.

"Mix the moss and straw like this," said the magpie, mixing them as she talked.

"Well," said the jackdaw, "that must follow, of course. I guessed that without being taught," and again the magpie only looked at the impolite bird.

"More moss, straw and feathers I place like this," said the kind magpie.

"Madam," broke in the starling, "all this is very well, but we knew all that you have told us." Not a word said the little builder.

But the nest building went on until the nest was just half finished, bird after bird telling the magpie that she was only telling them what they already knew.

Then the magpie would build no more, but flew away to a tree near by.

She stood perched upon the branch of a tree and said,—

"If ye were well skilled in my trade,
Pray why came ye to learn it of me"?

"Come down, please come down," coaxed the birds, "and show us how to finish the nest." But the magpie would not show them any more about it, and so the other birds could never make a round nest. Only the magpie's little home has a green canopy. All of the other birds' nests look like the magpie's nest cut in half to this very day.

THE STOLEN PEARLS

Long, long ago, in a city of sunny Italy, there lived a poor girl whose name was Lucy.

She loved her city, with its blue sky, its tall olive trees, its old worn pavements, and its beautiful buildings and columns.

Many of these buildings and columns were made of marble, and often the columns were carved in beautiful patterns.

Sometimes, when the sun was setting and throwing pink shadows over the columns, the carved flowers would look like real flowers.

Lucy was waiting maid for the wife of a rich nobleman, who lived in one of the grandest houses of the city.

The little maid took care of the dainty room of the rich lady, sweeping the velvet carpet, dusting the carved furniture and filling the costly vases with fragrant flowers every morning. She took care, too, of the soft silk dresses and bright jewels which her mistress wore.

Often, after Lucy had been dismissed for the day, she would go out into the great squares of the city and watch the crowds of people taking their evening walks, where the water of the fountains cooled the hot air.

Sometimes she would watch the birds fly down from the nests which they had built high up on the tops of the columns, where no one would harm them.

One day, after a grand ball, which the lady upon whom Lucy waited had attended, a long string of costly pearls was missing.

How excited everybody was! Who could have taken them? Every room was searched and everybody questioned, but the pearls could not be found.

"I am sure they were on this table," sobbed Lucy, pointing to a little dressing table which stood near the open window, "I put them there myself."

"It must have been Lucy," said the servants, "no one has a key to the room but her."

So little Lucy was taken to prison and the poor maid spent many lonesome hours there.

Then she was tried and found guilty. "She must die," said the people.

Near the prison was a tall marble column upon whose top stood a large figure called Justice.

In one of the hands the figure held a pair of scales, and in the other was a sword "as an emblem that Justice presided over the laws of the land and the homes and hearts of the people."

At last the day came on which Lucy was to die, and she was taken to the foot of the tall column on which Justice stood.

Many people had gathered to see the little maid. She clasped her hands and prayed that she might live.

Suddenly the sky became dark, flash after flash of lightning darted through the sky. The thunder rolled and great drops of rain began to fall.

Then came a loud crash and people hid their faces, for the arm of the statue of Justice had been struck and the scales were hurled to the ground.

There, in the scales, a little magpie had built her nest, and in its clay walls the necklace of pearls was woven.

Yes, a magpie had flown in at the window of the house of the nobleman and had stolen the pearls and had built them into her nest.

So Lucy was free again. Don't you think that she must have been very happy that night?

THE FOX AND THE CROW

"There," said Mrs. Grant, as she wiped her hands on the nice, clean towel that hung in the dairy, "these are the nicest cheeses I ever made. I think I will open the window a tiny bit and let in a whiff of fresh air.

"Those apple trees are beautiful today," and she took a long smell of the sweet perfume which the apple trees sent to her. "The pink and white blossoms look so pretty," she said, "but I must hurry into the house and get ready to go to market with the cheese."

The place where the dairy was built was a beautiful spot. It was in a valley near the old farmhouse which had been built so long that it had forgotten its own age.

All around the valley were high hills, thickly covered with pine, oak and birch trees.

Near the house were orchards of pear, cherry and apple trees.

The grass, in that valley, was so thickly dotted with pink, yellow and blue flowers, that from a little distance it looked like a green velvet carpet.

The birds knew all about those hills and could have told you, if they had wanted to, that it was the best place in all the country around in which to build nests, when they came north every summer.

Among the many birds who lived there was an old crow. Mrs. Glossy Feather she called herself and she had built her nest in the tallest pine tree of all.

In that nest lived a family of young crows who looked just like their mother. In fact, I don't think that anyone but their mother could have told the little crows apart.

"I wonder what Mrs. Grant is doing in that dairy today?" thought Mrs. Glossy Feather as she stood on the very top of the pine tree.

The crow made a very pretty picture as she stood on the tree against the blue sky. "There! she has opened the window a little, I will go and peep in."

"Caw, caw," she said to the little crows, which was her way of saying, "Be good children and don't quarrel. I will be back soon," and away she flew.

As she passed the little brook she stopped to look at herself in the water. "Yes, indeed, I am a very beautiful bird," and taking a little drink from the brook, she flew towards the dairy.

"Ah!" said she, as she looked in at the window and saw the seven cheeses in a row, "who knows but Mrs. Grant left the window open on purpose for me to go in and help myself. It is open just wide enough."

She looked all around, to see that no one was looking, stole softly in and took a large piece of cheese in her beak. Then she flew away, nodding politely to a fox who happened to be slyly taking a walk around the kitchen yard.

"Now, I wonder where she got that cheese," said he, smacking his lips. "I think I'll go and see." He had just finished dinner and wanted some cheese.

Soon he saw the open window, and, standing on his hind legs, peeped in. There stood the seven cheeses looking—oh! so tempting, but just out of his reach.

"I must push up the window a little and get in." He pushed and pushed, but he could not raise the window a bit.

"Perhaps Mrs. Glossy Feather will give me some of her cheese," he said, after he was tired of trying to raise the window, and he ran off to the woods.

There sat Mrs. Glossy Feather resting. It is hard work to fly, and to carry a big piece of cheese at the same time, you know.

"She is certainly very cunning," thought the fox, "but so am I. I will flatter her a little."

He went under the tree and bowed very politely. "It's a very fine day, is it not, Mrs. Glossy Feather?" he said.

Not a word did the crow answer. She knew if she spoke that the cheese would fall from her beak.

The fox tried again. "The wind, I believe, ma'am, is south. It is fine weather to make a good harvest of peas." Still the crow did not speak. "You have beautiful feathers, Mrs. Glossy Feather. You are such a beautiful bird that your voice must be very sweet. I want to hear a sweet song so much. Will you not sing a little for me?"

The silly crow forgot all about the cheese, so she opened her beak to sing, and down fell the cheese.

The fox laughed when he saw the cheese fall, and picking it up he ran away with it.

"She is a very vain, foolish crow," was all he said.



POEMS



MARCH

Fiercely and shrilly whistling,
Onward the wild winds blow,
Howling and shrieking and moaning,
With their spatter of ice and snow.

The sun looks cold and frightened,
Clouds from the heaven low how,
Trees like maddened creatures
Toss with the wind's drear sough.

"It bloweth where it listeth,"
It cries like an orphaned child,
Its strength, unseen, is mighty
Upon the hilltops wild.

But oft you've noticed the roughness
That covers a noble heart,
Which storms and bullies and blusters
While the tears to his warm eyes start?

'Tis thus upon its wild breast,
March nurses the infant Spring,
And stooping into the meadows
April plucks a wee, blue thing.

—*Frances L. Viers.*

SONG OF MARCH

An impetuous youth I own that I am,
Sometimes like a lion, sometimes like a
lamb;

I blunder and blow,
Bring sunshine and snow,
And days that are dreary and days that
are calm.

In passion I storm with a furious rage,
Destruction alone can my feelings as-
suage;

Then humbly I cry,
And softly I sigh,
While tender emotions my whole heart
engage.

There comes after me a maiden so sweet,
That earth must prepare for her beauti-
ful feet;

So gently I blow
Away frost and snow,
That zephyrs and sunshine fair April
may greet.

—*Mildred S. McFadden.*

THE SONGS OF BIRDS

The birds of morning rise and shake
The music from their souls again;
I hear them in the tangled brake;
They warble down the shadowy glen;
And still to me
They seem to be
Forever fluting out the call,
"Come up! Come up!
The royal feast
Is spread for man and bird and beast,
With peace on earth, good will to all."

—*Benjamin S. Parker.*

SPRING

"I hear the wild geese honking
From out the misty night,—
A sound of moving armies
On-sweeping in their might;
The river ice is drifting
Beneath their northward flight.

I hear the bluebird plaintive
From out the morning sky,
Or see his wings a-twinkle
That with the azure vie;
No other bird more welcome,
No more prophetic cry.

I hear the sparrow's ditty
Anear my study door;
A simple song of gladness
That winter days are o'er;
My heart is singing with him,
I love him more and more.

I hear the starling fluting
His liquid "O-ka-lee";
I hear the downy drumming
His vernal reveillé;
From out the maple orchard
The nuthatch calls to me.

O, spring is surely coming,
Her courtiers fill the air;
Each morn are new arrivals,
Each night her ways prepare;
I scent her fragrant garments
Her foot is on the stair."

—*John Burroughs.*

APRIL

Sec the apple orchard
 Bathing head and shoulders
 In the dazzling pea-green
 Rising-tide of April;
 While an ancient pear tree
 In the kitchen garden
 Spreads the rugged outline
 Of its jet-black branches
 Underneath a drifted
 Mass of snowy blossoms.
 Tinted is the herbage
 With unnumbered violets.
 Tiny sky-blue butterflies,
 Like uprooted flowerets,
 Flirt among the sunbeams.
 Hickory-tips are bursting
 Into clustering parachutes.
 On the white-oak saplings
 Pink and folded leaflets
 Now uncurl their tendrils
 Like the opening fingers
 Of soft new-born babies.
 Listen! From the marshes
 Multitudinous frog notes,
 Ringing out metallic,
 Like the ghosts of sleigh-bells;
 While a red-winged blackbird,
 Eager to be mating,
 From a bare twig bugles,
 "O-kal-ee—it's April!"
 —Ernest Crosby, in *Unity*.

A SONG OF SPRING

April at the loom of Spring,
 What is it she weaves?
 Golden sunlight, silver shower,
 Velvet grass and fragrant flower,
 Blossoms pink and buds of green,
 Hills with purple vales between,
 Garden vines and orchard trees
 Full of honey for the bees.
 Song in all the shadowed nooks,
 Music in the meadow brooks,
 April at the loom of Spring,
 What is it she weaves?
 Poetry in everything,
 Lyrics in the leaves!

 April at the loom of Spring,
 How the shuttles fly!
 Silver rain and golden ray,
 Wonder-fabric of the day
 With fantastic figures fair
 Wrought upon it everywhere;
 Bowers of beauty, boughs of birds,
 Brodered fields with petaled words,
 Woven color, scent and sound
 In the air and on the ground;
 April at the loom of Spring,
 How the shuttles fly!
 Poetry in everything—
 Earth and sea and sky!
 —Frank Dempster Sherman, in
Woman's Home Companion.

WHEN SPRING REALLY CAME

I heard a thousand blended notes,
 While in a grove I sat reclined,
 In that sweet mood when pleasant
 thoughts
 Bring sad thoughts to the mind.
 To her fair works did nature link
 The human soul that through me ran;
 And much it grieved my heart to think
 What man has made of man.
 Through primrose tufts, in that sweet
 bower
 The periwinkle trailed its wreaths;
 And 'tis my faith that every flower
 Enjoys the air it breathes.

The birds around me hopped and played
 Their thoughts I can not measure—
 But the least motion which they made,
 It seemed a thrill of pleasure.
 The budding twigs spread out their fan,
 To match the breezy air;
 And I must think, do all I can,
 That there was pleasure there.
 From Heaven if this belief be sent,
 If such be nature's holy plan,
 Have I not reason to lament
 What man has made of man?
 —William Wordsworth.

SPRING

A little bit of blowing,
 A little bit of snow,
 A little bit of growing,
 And crocuses will show.
 On every twig that's lonely a new green
 leaf will spring;
 On every patient tree-top a thrush will
 stop and sing.

A little bit of sleeting,
 A little bit of rain,
 The blue, blue sky for greeting,
 A snowdrop come again.
 And every frozen hillside its gift of grass
 will bring,
 And every day of winter another day of
 spring.

—Carolyn S. Bailey, in *St. Nicholas*.

COUNTRY LIFE

Happy the man who has the town es-
 caped!
 To him the whistling trees, the murmur-
 ing brooks,
 The shining pebbles preach
 Virtue's and wisdom's lore.

The whispering grove a holy temple is
 To him, where God draws nigher to his
 soul;

Every verdant sod a shrine,
 Whereby he kneels to Heaven.

The singing-birds on him bring slumber
 down,
 The singing-birds awake him, fluting
 sweet,

When shines the lovely red
 Of morning through the trees.

His straw-deck'd thatch, where doves
 bask in the sun,

And play and hop, invites to sweeter rest
 Than golden halls of state
 Or beds of down afford.

To him the plummy people sporting chirp,
 Chatter, and whistle, on his basket perch,
 And from his quiet hand
 Pick crumbs, or pease, or grain.

Happy the man who thus hath 'scaped
 the town!
 Him did an angel bless when he was
 born—

The cradle of the boy
 With heavenly flowers strewed.

—Gæthe.

THE TREE

The tree's early leaf-buds were bursting
 their brown,
 "Shall I take them away?" said the frost,
 sweeping down.

"No; leave them alone
 Till the blossoms have grown,"
 Prayed the tree, while he trembled from
 rootlet to crown.

The tree bore his blossoms, and all the
 birds sung,
 "Shall I take them away?" said the wind,
 as he swung.

"No; leave them alone
 Till the berries have grown,"
 Said the tree, while his leaflets quivering
 hung.

The tree bore his fruit in the mid-sum-
 mer glow.
 Said the child, "May I gather thy berries
 now?"

"Yes; all thou canst see;
 Take them; all are for thee,"
 Said the tree, while he bent down his
 laden boughs low.

—Bjornstjerne Bjornson.

VIOLETS

Violets, violets, sweet March violets,
 Sure as March comes, they'll come to
 First the White and then the blue—
 Pretty violets!

White, with just a pinky dye,
 Blue as little baby's eye,—
 So like violets.

Though the rough wind shakes the house,
 Knocks about the budding boughs,
 There are violets.

Though the passing snow-storm come,
 And the frozen birds sit dumb,
 Up spring violets.

One by one among the grass,
 Saying "Pluck me!" as we pass,—
 Scented violets.

By and by there'll be so many,
 We'll pluck dozens nor miss any:
 Sweet, sweet violets!

Children, when you go to play,
 Look beneath the hedge to-day:—
 Mamma likes violets.

—Dinah Maria Mulock.

TREE FEELINGS

I wonder if they like it—being trees?
 I suppose they do. . . .
 It must feel good to have the ground so
 flat,
 And feel yourself stand right straight up
 like that—
 So stiff in the middle—and then branch at
 ease,
 Big boughs that arch, small ones that
 bend and blow,
 And all those fringy leaves that flutter
 so.
 You'd think they'd break off at the lower
 end
 When the wind fills them, and their great
 heads bend.
 But then you think of all the roots they
 drop,
 As much at bottom as there is at top,—
 A double tree, widespread in earth and
 air
 Like a reflection in the water there.

I guess they like to stand still in the sun
 And just breathe out and in, and feel the
 cool sap run;
 And like to feel the rain run through
 their hair
 And slide down to the roots and settle
 there.
 But I think they like wind best. From
 the light touch
 That lets the leaves whisper and kiss so
 much,
 To the great swinging, tossing, flying
 wide,
 And all the time so stiff and strong inside!
 And the big winds, that pull, and make
 them feel
 How long their roots are, and the earth
 how leal!

And O the blossoms! And the wild
 seeds lost!
 And jewelled martyrdom of fiery frost!
 And fruit trees. I'd forgotten. No cold
 gem,
 But to be apples—and bow down with
 them.

—Charlotte Perkins Stetson.

A WOOD LYRIC

Into the stilly woods I go,
 Where the shades are deep and the wind
 flowers blow,
 And the hours are dreamy and lone and
 long,
 And the power of silence is greater than
 song.
 Into the stilly woods I go,
 Where the leaves are cool and the wind
 flowers blow.

When I go into the stilly woods,
 And know all the flowers in their sweet,
 shy hoods,
 The tender leaves in their simmer and
 sheen
 Of darkling shadow, diaphanous green,
 In those haunted halls where my footstep
 falls,
 Like one who enters eathedral walls,
 A spirit of beauty floods over me,
 As over a swimmer the waves of the sea,
 That strengthens and glories, refreshens
 and fills,
 Till all mine inner heart wakens and
 thrills
 With a new and a glad and a sweet de-
 light,
 And a sense of the infinite out of sight,
 Of the great unknown that we may not
 know,
 But only feel with an inward glow
 When into the great, glad woods we go.

O life-worn brothers, come with me
 Into the wood's hushed sanctity,
 Where the great eool branches are heavy
 with June,
 And the voices of summer are strung in
 tune;
 Come with me, O heart out-worn,
 Or spirit whom life's brute-struggles
 have torn,
 Come, tired and broken and wounded
 feet,
 Where the walls are greening, the floors
 are sweet,
 The roofs are breathing and heaven's airs
 meet.

—Wilfred Campbell.

THE BLUE-BIRD

I know the song that the blue-bird is singing—

Out in the appletree where he is swinging.

Brave little fellow! the skies may be dreary;

Nothing cares he while his heart is so cheery.

Hark! how the music leaps out from his throat.

Hark! was there ever so merry a note?

Listen awhile and you'll hear what he's saying

Up in the appletree swinging and swaying:

"Dear little blossoms down under the snow,

You must be weary of winter, I know;

Hark! while I sing you a message of cheer:

Summer is coming and springtime is here.

"Little white snowdrops! I pray you arise;

Bright yellow crocus come open your eyes:

Daffodils! Daffodils! say, do you hear?

Summer is coming, and springtime is here!"

—*Mrs. Emily Huntington Miller.*

QUEER NEIGHBORS

To the corner of our street came a newly-wedded pair:

She had feathers in her hat, he was gay and debonaire.

Underneath the maple shade where the shadows play and dance.

There they chose their bridal home (I was looking on by chance).

Peeping through the lowered blind, I was quiet as a mouse,

While I watched the cottage built—'twas a pretty rustic house.

Then I saw them moving in. First a carpet soft was spread;

Then—and this was all they had—just a downy feather bed.

Such an oddly-furnished house for the sunny month of June!

Not a change of raiment theirs; not a plate, or cup, or spoon,

Not a cupboard did they bring; not a table or a chair;

And I wondered much to see the contentment of the pair,

Though I never saw him read, yet he told her all the news;

Though she never stirred from home, yet she never had "the blues;"

Though she never did a "wash," they were always trim and neat;

Though she never cooked a meal, they had always food to eat.

How they managed thus to live was a mystery to me.

Long I wondered, but at last I determined I would see;

So I ventured to their door, but they fled with fear intense;

For the birds are keeping house in a corner of the fence.

—*Elizabeth Rosser in Youth's Instructor.*

OUT OF DOORS

The pleasantest place for a boy to be

Is out where the grass is growing;

As glad and free as a king is he,

Far up where the wind is blowing.

He's one with the bee and the butterfly,

The robin and he are brothers;

His tent is the sky so blue and so high,

Swept clean of the dust that smothers.

The treasures he seeks are a wayside flower,

A whistle shaped from the willow,

The diamond shower, the gold of an hour,

And mosses and ferns for a pillow.

The lessons he learns are greater than books,

And truer than words of sages;

He reads in the brooks and the violet nooks

The marvelous epics of ages!

—*Willis Warren Keeler.*

THE WOOD THRUSH

From out of the forest depths,
 Clear, sweet, and strong,
 Floats on the evening wind,
 Shy bird, thy flute-like song.

What is it thou wouldst tell?
 No secret woe nor wrong
 Tinges, with its sad chords, the silvery
 swell
 And liquid rush of thy melodious song.

Nor is it rapturous joy,
 A meaningless delirium of sound;
 The riotous license of a spirit fair,
 Knowing no check nor bound.

In my lone forest walk,
 Hidden away from sight and sound of
 men,
 I've heard the tinkling of a waterfall
 That leaped and sang, then lost itself
 again.

To the same key your voices wild attune,
 Pure, unimpassioned, free,
 No faint refrain of sorrow, hope, desire;
 Simply the dryad's joy—to be.

No human heart is yours;
 The passions wild that o'er it steal—
 Eternal longings, sorrow, and remorse—
 Ye neither know nor feel.

Nor are its joys your joys,
 Infinite answerings to the soul's desires;
 Yet not unequal are ye, after all—
 Each has the fullness that its need
 requires.

Sing on, shy bird and tinkling waterfall!
 From bounteous Nature's heart
 Hymnals of praise perpetually arise
 And in them you have part.

—Hannah Davis.

THE LITTLE BROWN WREN

The little brown wren has the brightest
 of eyes,
 And a foot of a very diminutive size;
 Her tail is as trig as the sail of a ship;
 She's demure, though she walks with a
 hop and skip;
 And her voice—but a flute were more fit
 than a pen,
 To tell of the voice of the little brown
 wren.

—Clinton Holland.

A PRETTY GOWN

All the shop windows in town are full
 Of silk and cotton and gingham and
 wool,
 But none of them shows a gown so gay
 As the one Mrs. Humming Bird wears to-
 day.

'Tis the very same fashion her grand-
 mother wore,
 And hasn't a seam or pucker or gore;
 The sun doesn't fade it, the rain doesn't
 spot,
 And it's just the thing whether chilly or
 hot.

'Tis a perfect fit, and it won't wear out,
 But will last her as long as she lives, no
 doubt.

Suggested Program

1. Song.
2. Devotional exercises.
3. Poem—The Tree.
4. Poem—The Bluebird.
5. Governor's Proclamation.
6. Reviews of the following articles by the older pupils:
 - (a) Why Children Should be Interested in Planting Trees.
 - (b) The Planting of Rural School Grounds.
 - (c) Hints on Rural School Grounds.
 - (d) Trimming Shade Trees.
 - (e) Forest Fire Legislation.
 - (f) Bird Food.
 - (g) Nesting-Boxes.
7. A Few Hours with the Wild Birds. (To be read).
8. Intersperse the above articles with songs and the stories and poems committed by the younger pupils.
9. Poem.—The Wood Thrush.

Indiana Bird Law

AN ACT FOR THE PROTECTION OF BIRDS, THEIR NESTS AND EGGS

[Approved March 5, 1891. Acts 1891, page 113. Burns R. S. 1894, Secs. 2212-2218.]

WILD BIRDS

Section 1. Be it enacted by the general assembly of the state of Indiana, That it shall be unlawful for any person to kill any wild bird other than a game bird, or purchase, offer for sale, any such wild bird after it has been killed, or to destroy the nests or the eggs of any wild bird.

GAME BIRDS

Sec. 2. For the purpose of this act the following only shall be considered game birds: The Anatidæ, commonly called swans, geese, brant and river and sea ducks; the Rallidæ, commonly known as rails, coots, mudhens and gallinules; the Limicolæ, commonly known as shore birds, plovers, surf birds, snipe, woodcock and sandpipers, tattlers and curlews; the Gallinæ, commonly known as wild turkeys, grouse, prairie chickens, quail and pheasants, all of which are not intended to be affected by this act.

PENALTY

Sec. 3. Any person violating the provisions of section one of this act shall, upon conviction, be fined in a sum not less than ten nor more than fifty dollars, to which may be added imprisonment for not less than five days nor more than thirty days.

PERMIT

Sec. 4. Sections one and two of this act shall not apply to any persons holding a permit giving the right to take birds or their nests and eggs for scientific purposes, as provided in section five of this act.

Sec. 5. Permits may be granted by the executive board of the Indiana Academy of Science to any properly accredited person, permitting the holder thereof to collect birds, their nests or eggs

for strictly scientific purposes. In order to obtain such permit the applicant for the same must present to said board written testimonials from two well-known scientific men certifying to the good character and fitness of said applicant to be entrusted with such privilege, and pay to said board one dollar to defray the necessary expense attending the granting of such permit, and must file with said board a properly executed bond in the sum of two hundred dollars, signed by at least two responsible citizens of the state as sureties. The bond shall be forfeited to the state, and the permit become void upon proof that the holder of such permit has killed any bird, or taken the nests or eggs of any bird for any other purpose than that named in this section, and shall further be subjected for each offense to the penalties provided in this act.

LIMIT OF PERMITS

Sec. 6. The permits authorized by this act shall be in force for two years only from the date of their issue and shall not be transferable.

BIRDS NOT PROTECTED

Sec. 7. The English or European house sparrow (*passer domesticus*), crows, hawks and other birds of prey are not included among the birds protected by this act.

REPEAL

Sec. 8. All acts or parts of acts heretofore passed in conflict with the provisions of this act are hereby repealed.

EMERGENCY

Sec. 9. An emergency is declared to exist for the immediate taking effect of this act, therefore the same shall be in force and effect from and after its passage.



DOG'S-TOOTH VIOLET

Arbor and Bird Day Annual

INDIANA

1907

ISSUED BY
FASSETT A. COTTON
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

PRESS OF
WILLIAM B. BURFORD
INDIANAPOLIS
1907

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UNITED STATES OF AMERICA

STATE OF INDIANA EXECUTIVE DEPARTMENT

A Proclamation

The mysteries of the changing seasons are about us. Budding foliage, bursting flowers and fragrant blossoms are everywhere. The air is vibrant with the babble of many waters and with the cries and songs of nestling birds. April,—changing, fickle, winsome April,—sits again “At the loom of Spring,” weaving of air and sunlight and of dew and shower a thousand “wonder fabrics.” Unseen but vital and mysterious forces are revivifying the earth and calling unto us to join in Nature’s annual triumph over death.

To this call we can make no more appropriate answer than to set apart a day for the celebration of the return of this glad new season, and for the planting of trees and shrubs. Every tree planted makes the earth more habitable and a happier place in which to dwell. It adds, also, to the material welfare of the State.

Therefore, in accordance with precedent and custom, and in keeping with the moving and impelling forces about us, I, J. Frank Hanly, Governor of the State of Indiana, do hereby designate, set apart and proclaim FRIDAY, APRIL 26, and FRIDAY, OCTOBER 25, 1907, as

ARBOR DAYS

and recommend that each of said days be observed by the people of the Commonwealth as a day of rest and celebration; that the ceremonies incident to the celebration of these days be characterized by the planting of trees and shrubs upon the grounds about public buildings and public institutions, upon the public highways and about private homes; that those in charge of the benevolent institutions of the State give recognition to these days by fitting observance, and that the schools, public and private, observe them, as far as practicable, by public exercises of such a character as will give the children of the State a better understanding and a higher appreciation of tree and bird life.

Let this be done in the interest of forestry cultivation, and with a view to adding to the beauty and the wealth and resources of the State, and to our own culture and happiness and the culture and happiness of our children. To him who understands the life of tree and bird and the lessons taught by them "The whispering grove a holy temple is," and every bird that has the gift of song, God's messenger.

Done at the Capitol of Indiana, in the City of Indianapolis, this sixteenth day of April, in the year of our Lord, nineteen hundred and seven, in the year of the independence of the United States the 131st and of the State of Indiana the 91st.

J. FRANK HANLY,
Governor of Indiana

(SEAL)

By the Governor:

FRED A. SIMS,
Secretary of State

The President's Letter

To the School Children of the United States:

Arbor Day (which means simply "Tree Day") is now observed in every State in our Union—and mainly in the schools. At various times from January to December, but chiefly in the month of April, you give a day or part of a day to special exercises and perhaps to actual tree planting, in recognition of the importance of trees to us as a Nation, and of what they yield in adornment, comfort, and useful products to the communities in which you live.

It is well that you should celebrate your Arbor Day thoughtfully, for within your lifetime the Nation's need of trees will become serious. We of an older generation can get along with what we have, though with growing hardship; but in your full manhood and womanhood you will want what nature once so bountifully supplied and man so thoughtlessly destroyed; and because of that want you will reproach us, not for what we have used, but for what we have wasted.

For the Nation, as for the man or woman and the boy or girl, the road to success is the right use of what we have and the improvement of present opportunity. If you neglect to prepare yourselves now for the duties and responsibilities which will fall upon you later, if you do not learn the things which you will need to know when your school days are over, you will suffer the consequences. So any nation which in its youth lives only for the day, reaps without sowing, and consumes without husbanding, must expect the penalty of the prodigal, whose labor could with difficulty find him the bare means of life.

A people without children would face a hopeless future; a country without trees is almost as hopeless; forests which are so used that they can not renew themselves will soon vanish, and with them all their benefits. A true forest is not merely a storehouse full of wood, but, as it were, a factory of wood, and at the same time a reservoir of water. When you help to preserve our forests or to plant new ones, you are acting the part of good citizens. The value of forestry deserves, therefore, to be taught in the schools, which aim to make good citizens of you. If your Arbor Day exercises help you to realize what benefits each one of you receives from the forests, and how by your assistance these benefits may continue, they will serve a good end.

THEODORE ROOSEVELT.

The White House, April 15, 1907.

To the Teachers and Pupils of Indiana

Last year I suggested that the entire Annual for this year be made by the children. In response to this suggestion, Mr. Cyrus D. Mead, Principal of the School for Feeble-Minded Youth, wrote the following: "If this school be allowed twenty pages our children will do the rest." This request was gladly granted. For some reason, certainly not from a lack of interest, no other school expressed a desire to contribute to the Annual. Late in the autumn I visited the school at Fort Wayne and found teachers and children so much interested in birds and nature in general that I decided to place as much space at their disposal as they wished. The result is more than gratifying.

I am very sorry to say that this issue probably contains the last article we shall have from Dr. Kellogg. For the past five years Dr. Kellogg has made valuable contributions without which the Annual would have lacked the greatest part of its inspiration. The key-note to his article "Companionship With Birds," is "the gate leading to the inner circle of the bird world is opened only through sympathy." Dr. Kellogg has entered this gate and communed with the birds as only few others have. I deeply regret his inability to be with us again. However, we may always be assured of his sympathy. In a recent letter he says: "If I can help the children to a kindly feeling toward the birds, I am preaching good sermons, and this is my mission."

Mr. W. W. Woollen, one of Indiana's great bird lovers, has not had time to help in a direct way this year. However, his book, "Birds of Buzzard's Roost," recently completed, will do more than any other one thing to promote a careful study of birds. This book contains illustrations and descriptions of fifty-two native birds—one for each week in the year. The descriptions are so attractively written that all may read and get the idea. I wish it were possible for at least one copy of this book to be in each school of the State.

As the years go by I feel that much is being done in the way of beautifying school grounds and of caring for birds. I shall make special effort this year to gather statistics along these two lines and I hope every teacher and pupil will co-operate. I wish to show that Indiana is either keeping abreast with her sister states, or that she is making a supreme effort to do so.

With greater confidence than ever in the teachers and pupils of the State, I am,

Sincerely,

F. A. COTTON,
State Superintendent Public Instruction.

*Knowing that Nature never did betray
The heart that loved her; 'tis her privilege,
Through all the years of this our life, to lead
From joy to joy: for she can so inform
The mind that is within us, so impress
With quietness and beauty, and so feed
With lofty thoughts, that neither evil tongues,
Rash judgments, nor the sneers of selfish men,
Nor greetings where no kindness is, nor all
The dreary intercourse of daily life,
Shall e'er prevail against us, or disturb
Our cheerful faith, that all which we behold
Is full of blessings.*

—WORDSWORTH.

Arbor Day on the Plains

MARIETTA HOOVER DUNN.



I HAVE always referred to it as "the year I was marooned." In truth, I taught school that year on a western prairie. Besides the school house there was a little village there—a motley collection of houses and straight-front stores huddled together in the "wind-swept space" of the limitless plain.

All ills have their compensations, and this year was no exception to the rule. I learned much—learned to know the ever-changing attractions of what, to the casual observer, appears to be a monotonous flat stretch of country. I learned to read every phase of the landscape—to find the most gorgeous tints and hues in the sun-seared prairie; learned to revel in the softening transformations of the spring-rains, the buffalo-beans, and the may-flowers; learned to feast my eyes on unobstructed sunsets gorgeous as a wide-spread rainbow; but something of more practical value, I learned to appreciate the greatness of the Arbor Day movement. This last lesson did not come out of the western celebration of the day, when we set out little, scraggy saplings by the side of dried poles that were saplings on the Arbor Day previous—that was too pathetic to impress any lesson.

It came about through a last-day-of-school picnic. All spring the children questioned daily, "Are we going to have a picnic in the grove the last day?" I had looked north and south, east and west, and had discovered no grove, but when the school-man at the helm sent out his bulletin saying we would go to Mr. Somebody's timber claim for a final picnic, I began to feel more confidence in what might be just off the horizon north.

On the day appointed obliging parents dropped the plows and, at the designated time, appeared on the prairie near the school-house with vehicles of varied sizes and construction. We were all packed in with the smelly rations and a great deal of enthusiasm. The eagerness of the children to reach "the grove" grew infectious. Their talk of the wonderful woods and the fanciful pictures of past picnics stirred my imagination, and I fell to dreaming of an Indiana wood musical with birds and the singing of a pebbly brook; arrow

grass edged the bank; yellow, waxen buttercups gleamed near; a great, mottled sycamore leaned over a deep pool splendid with shiners and wiggly with tad-poles; some frogs croaked farther down on a muddy bank, and opposite, a clump of ferns reflected daintily on the surface, broken only by the skipping-bugs; some magnificent beeches and splendid oaks on the little knoll beyond threw deep shadows that called to comfort on the mossy humps and leafy carpet—so my dream ran till dispelled by cries of “Here we are teacher! Here we are! We’re there! Ain’t this fine? Hooray!” Shouting and gleeful they scurried forward to *it*. Not in any stretch of my most luxurious imaginings could I call it *a grove*. A small timber-claim set close with tall saplings, straining up hopelessly in the effort to escape from the dreary dust of the desert soil below. Already, in the late spring-time, the leaves were yellow and falling. The children, as they ran, kicked up the dust as from a public highway, the sun beat down through the scant foliage, and some sad buzzards flew over-head, scanning the crowd for carrion. It was impossible to find a place free enough from close set saplings or sufficiently shaded for luncheon. At last we compromised by going beyond on the somewhat shaded edge of the prairie. The larger boys were sent miles away to a house for water, not a drop of which was to be found nearer than a driven well. Still eager, still pointing with pride to “the grove,” the children devoured their picnic fare, drank their picnic nectar—warm lemonade—and had the time of their lives. For me the very air was sordid. My hope and joy in the day were so dead, I instinctively kept an eye on the circling buzzards. For the first time I realized the wealth of possibilities that lie in Indiana soil and the flagrancy of the careless destruction of forests and the indifference to planting new groves and shade trees. I wished that every teacher in the Indiana country might share my lesson that they might awake to the appreciation of their Hoosier heritage of natural groves and responsive soil and be fired with the enthusiasm that would make Arbor Day a grand influence in the direction of city, village, school-yard and country-side improvement and beautifying.

Arbor Day in Indiana

SARAH E. COTTON

In April 1870 the *Indiana School Journal* made the following statement: "School grounds can be found in abundance in different parts of the state which have been occupied five, ten and in some cases fifteen years and yet are as barren of trees as the Sahara."

Almost forty years have passed since this utterance and yet we have school grounds today in this same condition. Reform moves slowly. Not a year has passed since 1870 but pleas have been made—earnest pleas—for planting trees. The *Indiana School Journal* kept the matter constantly before the people. Occasionally a State Superintendent of Public Instruction became interested and added his enthusiasm to that of the *Journal*. Hon John W. Holcombe was the first superintendent to inaugurate Arbor Day and during his administration of two years many rural schools celebrated Arbor Day by planting trees.

Superintendent Harvey M. LaFollette continued the good work begun by Superintendent Holcombe.

In 1896 Superintendent David M. Geeting vigorously took up the work and since then two days each, one in April and one in October or November, have been observed.

Still we have school grounds which "are as barren of trees as the Sahara." Reform surely moves slowly. In one brief season the entire state could be transformed. Two or three teachers can not do this. There must be a co-operation of teacher, pupil and citizen, and these must surely have in their hearts a love for the beautiful.

Last Spring Indianapolis was the seat of three "lightning campaigns." Within a few short weeks more than \$500,000 were raised. This was for benevolent institutions, things worth while. Industry, earnestness of purpose and a belief in the end sought for, were the factors that won the day. Why is it not possible for Indiana to have a "lightning campaign" to beautify country and village school premises? We certainly have a purpose and we believe in it. Are we industrious and earnest enough to bring about the transformation? One year from this time should see Indiana free from buildings similar to the one herein pictured.



It will be profitable to read again the entire article "Hints on Rural School Grounds" by Bailey in last year's Annual. The following is especially helpful: "Select those trees and shrubs which are the commonest, because they are the cheapest, hardiest and most likely to grow. * * * Scatter a few trees along the fence and about the building. Maples, basswood, elms, ashes, oaks, buttonwoods, beeches, birches, hickories, poplars, a few pines or spruce or hemlock—any of these are excellent." Tulip poplars, locusts, mulberries, walnuts, buckeyes, wild cherry, and crab apple are also among our best native trees.

For shrubs Mr. Bailey suggests the following: "Willows, witch-hazel, dogwood, wild roses, thorn apples, haws, elders, sumac, wild honeysuckles," to which should be added: Waahoo, Judas tree (red-bud), Fringe tree, sassafras, bittersweet, trumpet creeper and elder.

Roses, elders and the trumpet creeper are excellent fence bushes.

The suggestion, to get shrubs from the farm yard, is an excellent one. Hollyhocks, flags, wild asters, goldenrod and hundreds of other beautiful things which may be had simply for a little trouble, add much to the decorative scheme. Place these in front of the shrubs.

There are many beautiful combinations that may be made with the trees, shrubs and flowers above suggested, and with the teacher as the leading spirit and pupils and patrons as close seconds what may we not look for on our next Arbor Day, October 25, 1907?

*Cut used in this Article loaned by Department of Education, New York State.

Dates of Establishment of Arbor Day

1872—Nebraska.

1875—Kansas.

1876—Minnesota.

1881—West Virginia.

1882—Michigan, Ohio.

1884—Indiana, New Jersey.

1885—New Hampshire, Vermont.

1886—Connecticut, Florida, Idaho, Massachusetts, Missouri,
Rhode Island.

1887—Alabama, Iowa, Maine, Nevada, Oregon, Pennsylvania,
Tennessee.

1888—Illinois, Wyoming.

1889—Maryland, New York, Texas, Wisconsin.

1890—Colorado, Georgia, North Dakota

1891—New Mexico.

1892—Virginia.

1894—Kentucky.

1895—Arizona, Arkansas, Montana.

1896—Utah.

1899—South Carolina.

1901—Delaware.

1902—Mississippi.

Arbor Day not observed in Alaska, District of Columbia, Oklahoma, Louisiana, Washington.

From the Report of the State Board of Forestry

The planting contemplated this fall and which is now in progress is as follows:

Eight acres, clay upland, 620 feet elevation, white oak and hickory.

Seven acres, bottom land, 600 feet elevation, red oak, burr oak and large shellbark hickory.

Five acres, upland clay, 700 feet elevation, American chestnut.

Three acres, upland porous clay, 700 feet elevation, black walnut and American chestnut.

Three acres, upland clay, 570 feet elevation, American chestnut.

Five acres, upland clay, 620 feet elevation, mixed oaks and hickory.

In addition to this regular planting, all the fields planted in former years will be gone over and the vacancies planted with either seeds or seedlings, as is desired. This work has not progressed far enough to give the exact extent in this report, but will be continued throughout the fall, winter and spring until completed. To accomplish this work and to plant a larger nursery the following list of seeds and seedlings have been ordered and are now arriving at Henryville:

Fifteen bushels American chestnuts.

Eight hundred pounds American ash seeds.

One hundred bushels black walnuts.

Five hundred pounds yellow poplar seeds.

Five sacks sweet gum balls.

Ten bushels shellbark hickory nuts.

Ten bushels white oak acorns.

Ten bushels red oak acorns.

Ten bushels burr oak acorns.

Fifty pounds American linden seeds.

Twenty pounds standard white pine seeds.

Twenty thousand American ash seedlings.

Twenty thousand American elm seedlings.

Ten thousand yellow poplar seedlings.

Selected Poems

The Return of Spring

“Awake, sweet Spring! the night is gone at last,
The sun has risen to greet thee from yon hill,
Thou hast too long been sleeping; now awake!
The world once more with joy and gladness fill.
And as she wakes all nature takes new life,
The blossoms come where once the buds have been,
And wafted on the soft and balmy air
Their fragrance comes to cheer our hearts again.
From yonder hills, whose peaks have long been white,
The snow, now melted by the sun’s warm rays,
Has formed a rippling brooklet whose sweet notes
Re-echo from the woods in songs of praise.
The modest violet peeps above the ground
And nods politely to the daffodil,
The robin’s voice is heard among the boughs
In answer to his neighbor’s cheerful trill.
Sweet Spring! who is there that hath known thy charms,
And felt thy lovely breath, and failed to see
Thee as the emblem of that inborn hope
Of death that was and life that is to be?
Thou art the Resurrection! and may we
Forget the past, and each succeeding day
Renew our love, our hope, and make our lives
To shed a fragrance like the breath of May.”

—E. NISBET.

April

The sun rose up in the morn,
And looked from east to west;
And April lay still and white—
Then he called the wind from his rest,
Sigh and lament! he said,
Sweet April, the child, is dead!
The sun touched his lips to her cheeks
And the color returned in a glow;
The wind laid his hand on her hair
And it glistened under the snow
As laughing aloud in glee—
Sweet April shook herself free.

—E. P. UTTER.

Green Fields and Running Brooks

Ho! green fields and running brooks!
 Knotted strings and fishing-hooks
 Of the truant, stealing down
 Weedy backways of the town.

Where the sunshine overlooks,
 By green fields and running brooks,
 All intruding guests of chance
 With a golden tolerance.

Cooing doves, or pensive pair
 Of picnickers, straying there—
 By green fields and running brooks,
 Sylvan shades and mossy nooks!

And—O Dreamer of the Days,
 Murmur of roundelay
 All unsung of words or books,
 Sing green fields and running brooks!

—JAMES WHITCOMB RILEY.

The Trees

Time is never wasted listening to the trees;
 If to heaven as grandly we arose as these,
 Holding toward each other half their kindly grace,
 Haply we were worthier of our human place.

Bending down to meet you on the hillside path,
 Birch and oak and maple each his welcome hath;
 Each his own fine cadence, his familiar word,
 By the ear accustomed, always plainly heard.

Every tree gives answer to some different mood;
 This one helps you, climbing; that for rest is good;
 Beekoning friends, companions, sentinels they are;
 Good to live and die with, good to greet afar.

O ye glorious creatures, heirs with us of earth!
 Might we win the secret of our loftier birth,—
 From our depths of being grow like you and climb
 To our heights of blessing,—life would be sublime!

—LUCY LARCOM.

Alone in the Woods

Here in the leafy forest, where the trees
 Are rugged with old age, I spend the day;
 And I am happy here, for here I may
 Be undisturbed by mortals. Scenes like these
 Are beautiful indeed; and he who sees
 No charms in this green woodland, far away
 From haunts of men, has surely gone astray
 From nature and from God. All things that please
 The senses in these forest glades I find:
 Fair tints that cheer the eye, and soft caress
 Of woodland breeze, and sound of woodland kind,
 And sweet companionship that soothes the mind
 As nothing else can soothe; and here I dream
 The hours away, in peace and happiness.

—OSCAR JOHNSON, IN NATIONAL MAGAZINE.

November

Soft, sweet, and sad in its pathetic glory,
 The pale November sunshine floods the earth,
 Like a bright ending to a mournful story,
 Or in a minor tone, a chord of mirth.

Before the wet west wind forever drifting,
 The falling leaves fly o'er the garden walks;
 The wet west wind the bare, gaunt branches lifting,
 And bowing to black mold the withered stalks.

The blackbird whistles to the lingering thrushes.
 The wren chirps welcome to the hardy tit,
 While the brave robin, 'neath the holly-bushes,
 Sees what of berried stores still gleams for it.

And the heart, sad for vanished hopes, in turning
 Back to lost summer from the winter's chill,
 Sees the rich promise through the weary yearning.
 That heaven and spring will each our trust fulfill.

—SUSAN KELLY PHILLIPS.

The Purple Finch

Some April day, with tardy hints of spring
Upon the maples, robins on the wing,
And bluebirds warbling softly, blackbirds in
By the last train, when chickadees begin
To dream of love and home.—some April day
A startling, wakening song rings through the trees,
That drowns all sound and echoes overtake,
And in the treetops, flitting restlessly
From bough to bough, a purple finch I see,
Blushing unto his breast the while he sings
For very joy of speech, for love's dear sake,—
Who could not sing, knowing such ecstasy?
The bluebird wakens from his dream to hear,
And robin redbreast wondering draws near,
Alarmed at innovations such as these
From strangers singing in his own home trees.
Draught of the morning, warm and clear and sweet,
A sparkling, effervescing melody,
Freshly uncorked and running over, spilled
O'er every bough until the air is filled
With the song fragrance; hurrying, rushing on
In maddest haste lest springtime may be gone
Before his story is half told; so much to tell
And time so short.—a very rhapsody,
As if his throat would burst with all the song
Pent up within and gathering as it rose,
Rippling the feathers as it swept along
To meet the air, and charge the April day
With an electric fiery energy.

—NELLY HART WOODWORTH, IN THE TRANSCRIPT.

December

With whisper and rustle and start and hush
The dry leaves murmur on tree and bush.
On somber pines, with boughs bent low,
Forsaken nests are piled with snow.
The chickadees, alert for seeds,
Chatter and cling to the swaying weeds,
The snow drifts deep in the country ways,
And short and cold are the cheerless days,
Yet, fair on the brow of the frozen night
The Christmas stars shine, large and bright.

—SARA ANDREW SHAFER, IN THE OUTLOOK.

The First Snow-Fall

The snow had begun in the gloaming,
And busily all the night,
Had been heaping field and highway
With a silence deep and white.

Every pine and fir and hemlock
Wore ermine too dear for an earl,
And the poorest twig on the elm tree
Was ridged inch-deep with pearl.

From sheds new-roofed with Carrara
Came Chanticleer's muffled crow,
The stiff rails were softened to swan's-down;
And still fluttered down the snow.

I stood and watched by the window
The noiseless work of the sky
And the sudden flurries of snowbirds,
Like brown leaves whirling by.

—JAMES RUSSELL LOWELL (ABRIDGED).

Winter Song

When icicles hang by the wall,
 And Dick, the shepherd, blows his nail,
 And Tom bears logs into the hall,
 And milk comes frozen home in pail;
 When blood is nipp'd and ways be foul,
 Then nightly sings the staring owl,
 To-who;
 Tu-whit, To-who, a merry note,
 While greasy Joan doth keel the pot.

When all around the wind doth blow,
 And coughing drowns the parson's saw,
 And birds sit brooding in the mow,
 And Marian's nose looks red and raw,
 When roasted crabs hiss in the bowl,
 Then nightly sings the staring owl,
 To-who;
 Tu-whit, To-who, a merry note,
 While greasy Joan doth keel the pot.

—SHAKESPEARE.

Myth and Romance

Proem

There is no rhyme that is half so sweet
 As the song of the wind in the rippling wheat;
 There is no metre that's half so fine
 As the lilt of the brook under rock and vine;
 And the loveliest lyric I ever heard
 Was the wildwood strain of a forest bird.
 If the wind and the brook and the bird would teach
 My heart their beautiful parts of speech,
 And the natural art that they say these with,
 My soul would sing of beauty and myth
 In a rhyme and a metre that none before
 Have sung in their love, or dreamed in their lore,
 And the world would be richer one poet the more.

—MADISON CAWEIN (COURTESY OF MRS. JENNIE ELROD).

It Isn't Raining Rain to Me

It isn't raining rain to me;
It's raining daffodils;
In every dimpled drop I see
Wild flowers in the hills.
And clouds of gray engulf the day
And overwhelm the town.
It isn't raining rain to me;
It's raining roses down.

It isn't raining rain to me;
But fields of clover bloom;
Where any buccaneering bee
May find a bed and room.
A health unto the happy,
A fig for him who frets!
It isn't raining rain to me;
It's raining violets.

ROBERT LOVEMAN.

I know not which I love the most,
Nor which the comeliest shows,
The timid, bashful violet,
Or the royal-hearted rose;

The pansy in her simple dress,
The pink, with cheek of red,
Or the faint, fair heliotrope, which hangs.
Like a bashful maid, her head.

For I love and prize you, one and all.
From the least low bloom of spring
To the lily fair, whose clothes outshine
The raiment of a king.

—PHOEBE CARY.

December

In a drear-nighted December,
Too happy, happy tree,
Thy branches ne'er remember
Their green felicity.
The north can not undo them,
With a sleety whistle through them;
Nor frozen thawings glue them
From budding at the prime.

In a drear-nighted December,
Too happy, happy brook,
Thy bubblings ne'er remember
Apollo's summer look;
But with a sweet forgetting,
They stay their crystal fretting
Never, never petting
About the frozen time.

Ah! would 'twere so with many
A gentle girl and boy!
But were there ever any
Writhed not at passed joy?
To know the change and feel it,
When there is none to heal it,
Nor numbed sense to steal it,
Was never said in rhyme.

—JOHN KEATS.

Companionship with Birds

There is a knowledge of Birds—a very accurate and full knowledge too, that may not carry with it, companionship. To be able to name them, to know their familiar haunts, the time of their coming, the architecture of their homes, the notes they sing, should be the gates leading to the inner circle of their world, but it may not. The door hither is opened only through sympathy. Once entered, what a delightful realm. What a different place this world would be if God had forgotten to bring in the birds! Some live as if He had. They walk in a birdless world, songless and dead; how strangely dismal! Why not awake some day before long from the dull and stupid indifference, to the wonder of melody that pours through every window, and to the beauty that flits by every pathway? If needful, begin a study that may lead to the bright dawn of a happier day.

I shall never cease to be grateful to the old naturalist in my Ohio boyhood home, who through gentle enthusiasm, replaced the cruel of a boy's heart by a charming pleasure in the innocent friends, and this was the passport into a happy out-of-doors.

In the wilds of western mountains, in the out-of-way places of the desert, amid the desolate ruins of Foreign lands, in city or country these friends have never failed to cheer me, chattering their gossip in my ears, and driving lonesomeness and gloom from my heart by their songs. My recreation hours are spent with them, and as country fields have come to be a part of city, through rapid travel such hours become more frequent.

But for my last exploration! One hour by trolley and twenty minutes across farm lands and we are in the village of the Great Blue Heron. These are society birds, and colonize, and are most interesting for many reasons. John Burroughs says of them, "It is a favorite bird of mine and my son."

Long before you reach the small timber patch, you hear their noise, which afterward you discover to be the restless cry of the babies and the scolding of the mothers. The forest consists of a few old trees, oaks, sycamores, hickories, and gums, thickly grown about with underbrush. Here they have had their home from a date far beyond the record of the white man—which is more than two hundred years. Who knows how much longer? It may be five hundred years, or a thousand, but this matters little to Americans who are indifferent to ancestral doings—but safe to say it is one of the oldest cities on the continent.

As you approach, the rush of great wings startles you—perhaps one hundred ungainly birds rise out of the leafy branches of the big

trees and circle above your head and gaze at you with wonder, as if to inspect you and determine whether you are friendly or unfriendly. If you show intentions of peace, they soon settle down and go about their usual occupation, which is to nourish and feed their children. The parent birds are great fishers and by this are not limited to any one species of sea food. Frogs and snakes are just as acceptable as fish, and are more easily taken, but they bring in all kinds of stuff. I watched through my field glasses the coming and going of these busy providers and saw them bring food to the little ones. One bird brought a long snake, and I have wondered how she divided between the two hungry nestlings who caught hold of it before she had settled on the edge of the nest and were scrambling for the bigger part. Perhaps each one got an end and worked toward the other and the one that swallowed fastest got the most of it.

I saw some little ones disappointed and that, too, near night time. No doubt hungry and having waited patiently for hours, and the mother had worked all this time in search of something, but at last had to come with nothing.

They did not conceal their feelings. At first they coaxed and teased and took hold of the beak of the mother bird, but soon they became fretful and then angry, and it wound up in a family quarrel in which I thought the little fellows would be tossed out of the nest, but after the hot tussle they settled down in quiet and waited for the return of the other parent, which I hope had better luck and would bring some supper.

The Heron occupy but a few trees, but these are as overcrowded as a city tenement. In one oak are fifteen nests, and these trees are literally loaded with birds. This time of the year leaves prevent seeing them, as they understand well the art of dropping behind a bunch of leaves in concealment. The nests at this time (June) contain little ones at every stage of development. Some are just hatching and others are about ready for the journey of life. Such a noisy set they are! The least disturbance and they become excited and perform their antics through the air. Big, and seemingly awkward, as they are, they move very gracefully, and are adepts at sudden turns in midair.

The rookery is not far from the swamps and the great river marshes. I have made a number of picture expeditions and have succeeded in taking some young in the nests, but it is very difficult to do. The trees were not especially grown for my purpose. Exposure from the ground by the use of the Telephoto lens, has brought some good results.

I must relate the sad story of a great catastrophe that has overtaken the bird city. It is to them as severe as the earthquake of San Francisco.

A terrible storm swept the country. Wind and hail and rain beat down with fury. I was apprehensive of their safety, and I knew their exposure and helplessness. As soon as my duties permitted—which was three days afterward—I went to the place and my apprehensions were more than confirmed. As we approached the nesting trees, to our sorrow we found the remains of two well-grown birds that had been blown from the nests, and had been eaten by wild animals—possums or skunks. A search amid the bushes discovered at least ten dead birds. These were of different sizes from a few days old to almost full grown.

As we were exploring to know the extent of the ruin and disaster, we ran upon two live birds, but quite badly crippled,—a broken wing with one, and the other was bruised beyond hope of recovery. We placed them in a nest, as best we could. One was found that seemed well, although homeless. He had become an expert in guarding himself and concealing his whereabouts, and it was by the merest accident that we ran upon him and stirred him out. We reluctantly let him go again into the wild woods, but he has been fed in his lowly position, by his parents, and in a few days more will be promoted to the higher realms, and be flying above all danger and fear. The last report was, he is doing well.

I have been led to great admiration for this community and my sympathy for birds has been increased. How cruel is nature: the innocent and defenseless, without sympathy, it scatters and destroys. Wind and hail are merciless, and dash to destruction. Man is the only creature that can, to any extent, cope with the wild elements. He, by brain and through long struggle, and supreme achievement, has arisen to mastery. The lightnings and waves now serve his bidding. What is his mission toward the helpless, but to use his conquering power to protect and assist them. How to the contrary it is to see him in selfish brutality going forth with his “improved” weapons, to slaughter the beautiful and helpless creatures God has given over to his care, and who minister to his joy.

Has not the time come for the old thoughtless and cruel spirit to give place to the new and kindlier feeling that will bring power to the protection and care of these that so enrich our world?

Such a catastrophe as I have described is beyond his control, but such may never overtake the unfortunate settlement again; but such destruction is but a slight incident compared to that wrought by the heartless in almost perpetual reign of terror toward our delightful feathered friends.

H. W. KELLOGG.

Wilmington, Del.

Work from Pupils of the Indiana School for Feeble-Minded Youth

The following pages represent different phases of school work proper from the Indiana School for Feeble-Minded Youth at Fort Wayne. Irrespective of half day shop, farm, or domestic department work, eight different branches of manual, physical, music, and art instruction are offered children of proper age and suitable condition. Accompanying this is a regularly graded kindergarten, primary, and grade school. Four hundred girls and boys, from a population of one thousand and forty-six, are given particular school training, after which they are passed to the larger institution life and in their degree are useful. Each child above the kindergarten is allowed one and two subjects in addition to his primary or grade schooling.

The efforts of forty-eight pupils are here submitted, the best fifty-eight pieces chosen from classes in kindergarten, primary, grade, clay modeling, mechanical drawing and wood work, and art. Much creditable material was of necessity passed. Sixteen out of 22 schools are represented, including the youngest and oldest, beginners and most advanced. Manuscripts were corrected by the teacher, as to punctuation, spelling, etc., handed back and rewritten by the pupil, the same as any composition work in the public school. The selection and choice of words is the child's own, the ideas are original, mostly from observation; the rest, from reading, or from hearing stories told, then reproduced by the boy or girl. The manual, drawn, and art is their own.

The ages of children from the kindergarten to the third primary are from two to eight years more than children of the same grade in the public schools. Pupils from the fourth to the seventh year will be from four to eight years older. A noticeable feature is that these children, as a rule, are able to express themselves in the language of children two or three grades in advance of the reader they themselves may be in, the chief cause for this being their age.

All observations of the children, as to truth and fact, have been verified by older persons. The tree and the bird are but a phase of his daily school room pleasure. The chief result has been a quickening of the powers of observation, a creating of interest in his surroundings, thereby opening the field to the teacher of reading, writing, oral expression, drawing, occupation, manual, or art. Not the least is the more humane spirit instilled by the visible expression of the Architect of All. Few people are so stupid as not to grasp His lessons from such simple texts as the tree and bird!



BIRDS AND TREES—FREEHAND CUTTING (ORIGINAL) PEARL B.—1ST GRADE



BIRD HOUSE—SEWED
RUSSEL S.—KG.



FIRST BLUE JAY—FRED L.—KG.



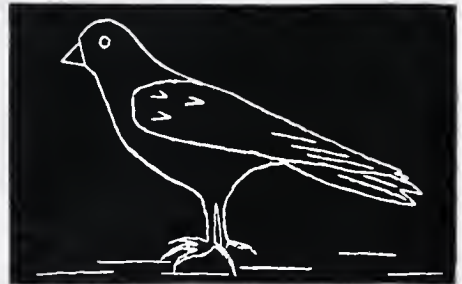
ROBIN FEEDING YOUNG—FREEHAND CUTTING (FROM
PICTURE) PEARL B.—1ST GRADE.



CROW—CHARLES B.—KG.



OUR WREN BOX FROM WINDOW—MAX I.—KG.



CROW—SEWED—THOMAS I.—KG.



The Flicker's Nest

LEE T., GRADE 1.

JUNE 5, 1907.

About three weeks ago I saw a hole in a little old willow tree on our grounds. I climbed up on a box to look in the hole and a mamma flicker flew out right in my face. There were a lot of little chips on the ground by the tree. I lay down on the ground. She came back to the hole and went in the hole and stuck her head out two or three times.

Then she brought up more chips and dropped them on the ground. Now she has a nest there. Now she is not afraid of me. I can go up nearly to her and she will not fly away. She is tame. Sometimes she scolds me but I would not touch her nest, for I love the birds.

Our Song Sparrow's Nest

JESSIE P., GRADE 1.

JUNE, 1907.

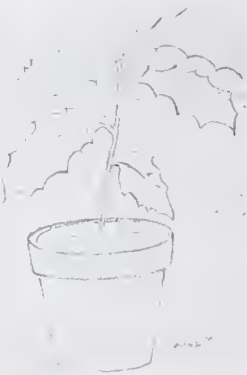
Out in our school yard there is a little nest, it is a little song sparrow's nest. The bird made it with her bill. It is grass and hair. Mama bird put three eggs in it and she sat on them. Papa sparrow gave her fish worms to eat. One day some little birds came out and they did not have feathers. Papa fed the baby birds. Mama fed them too. They grew and when they were big they flew away. The nest is still here but it is empty.

The Little Oak Tree

ELMER B., GRADE 1.

MAY 28, 1907.

We planted an acorn in our window box February 20. It did not come up for a long time and we thought it was dead. One day we saw that the dirt was cracked above the acorn and in a short time a little red shoot pushed itself through the ground. For about two weeks it looked like a red stem, then the end began to spread and two little leaves came out. They were red too. It grew and grew and new leaves came out, and now they have turned green. When school is out, one of the boys will take care of it. Then we will plant it on our play ground on Arbor Day, and we will take



OAK GROWN FROM ACORN, THIS SPRING,
IN SCHOOLROOM—LIDA N.

good care of it. Some day we can sit in its cool shade and birds will build their nests in it.

The Robin's Nest

EMERSON I., GRADE 1.

MAY 27, 1907.

A father and mother robin built their nest in a maple tree on our play ground this spring. After the robins built their nest the mother laid her eggs and sat on them two or three weeks. When the little birds were hatched the mother and father hunted fish worms for them. We would go close to the tree and it did not scare her. One day we thought we would help her. We dug some worms and threw them up to her and she fed them to her babies. Father robin brought a worm one day that was too big. Mother and father pulled and pulled and broke it in two. The mother fed one piece to a baby and then took the piece father had and fed it to another baby. The little birds will soon leave the nest and find their own worms. We hope father and mother robin will come back next year and build their nest on our play ground.



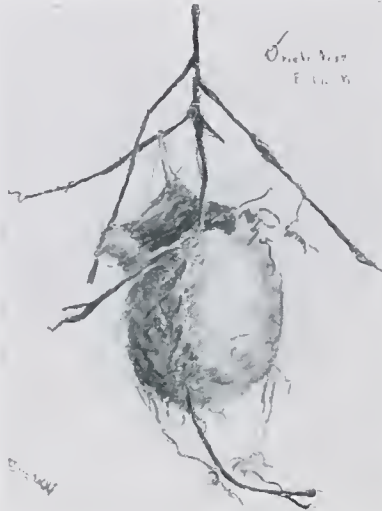
COTTONWOOD BUD DEVELOPED IN SCHOOLROOM APRIL 15-APRIL 30-MAY 14—CORA W

The Oriole

JESSIE M., GRADE 2.

APRIL 19, 1907.

The oriole makes its nest high up and far out on a slim limb. First they make their nest, then they lay their eggs. When the eggs hatch the father and mother have a busy time feeding their babies. Sometimes when the young ones are ready to leave the nest one gets its foot caught in the hair of the nest and hangs time down on the limb. There was an oriole in a cottonwood tree on one side of it dead. The same orioles come back every year and build big cottonwood



and mother have ing their babies. the young ones the nest one gets the hair. One girl's playground oriole's nest up tree. There was hanging on one The hair got rotten bird fell down. come back every a nest in the tree.

ORIOLE NEST—FROM LIFE—ELLA W

What Birds Eat

ROSE H., GRADE 2.

MAY 10, 1907.

Birds eat many things that make us a great deal of trouble. They like insects which spoil our fruit and eat up our vegetables. Owls and hawks eat mice and ground squirrels that spoil the crops. Other birds eat the seeds of weeds that the farmers do not like.

Birds eat very often, so they destroy many insects and weeds. They get things to eat in different places. The catbird eats insects that kill fruit trees. He eats a thousand insects for every cherry he eats. The robin eats cankerworms and cutworms that spoil corn. Bluebirds eat grasshoppers and crickets.

Woodpeckers hunt all over a tree and tap on the bark and listen and if they hear a grub inside they bore a hole in the bark and pull it out. The holes do not hurt the trees.

Swallows fly and catch little flies and mosquitoes while they are flying in the air. Some birds eat dead animals. We ought to like these birds very much because if the dead things were not taken away they would make us sick.

Some birds gather food in the fall and hide it where they can find it in the winter. Blue jays get acorns and nuts and put them in a hole in a tree. One kind of woodpecker digs holes in the bark of a tree and puts an acorn into each hole.

Our Bird Day

MATTIE D., GRADE 3.

JUNE, 1907.

We celebrated our Bird Day on April 26. Our program was made by the different schools. Our orchestra played and a chorus of boys sang, "The Forest Jubilee Band." Our Superintendent read us the Governor's Proclamation about the trees and birds and then he gave us a good talk.

Each school had something different about birds that surprised and pleased us all. We had a table full of the different kinds of mounted birds, also birds modeled in clay, to show us just how the birds looked. They were all found dead and not killed.

We had a fine lot of nests, too. These are some of them: crow, hawk, cardinal, blue jay, indigo bunting, humming bird, oriole, and we had the pictures of birds hanging over each nest.

Our kindergarten gave us dainty action songs about the birds and our older boys had a crow song. They were dressed up like the crows and were sitting on a fence, as they sang "caw!" "caw!" A scare crow was brought in and stood in front of them while they sang, and when they were through, the scare crow dropped down and ran out of the hall. We had all thought him a real scare crow; instead of that he was a real boy. Every body laughed to see him run away.



WOODPECKER—GRACE P.—MATTIE S.—MAMIE MC.

Other schools gave songs and recitations. Our school gave different bird notes and calls. Bobwhite was whistled by one of our girls while we sang the chorus.

The schools had bird charades and rhymes which we were to guess. These are a few of them:

“A flash of sky on the wing.”

“Black robber of the cornfield, oh, beware!
The farmer can do other things than scare.”

“You imitate the foe who does you harm, and so to the world give alarm.”

In acting our charades we used children, objects, and pictures. Some of the birds represented were chickadee, sparrow, meadow-lark, and kingfisher.

At the close of our exercises our Principal gave us an interesting talk about the birds and told us many things that we did not know. Our studying and our talking about the birds has made us love them more all the time.

Our Arbor Day

ESTHER W., GRADE 3. MARCH 7, 1907.

We all enjoy Arbor Day because we are helping the birds and other people as well as ourselves when we plant trees.

We had our last Arbor Day Oct. 26, 1906.

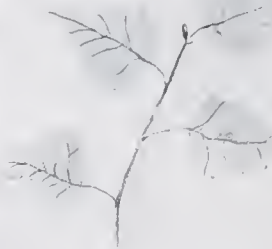
The birds like to build their nests in the trees.

There was a man from the west who was the first man to write and talk Arbor Day for all the school children. His name was J. Sterling Morton. We plant trees once every year. Last year we went in our school hall and all of the schools sang and said verses about the birds and trees.

Our Superintendent came in and talked to us and told us about how much he loved trees. He told us that one day he went to the farm to cut some trees for lumber; he went to a tree, but it had such nice green leaves he did not want to cut it down, so he came to another tree, but it was so alive he let it live.



COTTONWOOD LEAF—ESSIE T.



White Birch

SPRAY OF WHITE BIRCH—ROSE H

As he was walking along with one of the boys, they came to an old dead tree. He said that would be the thing, but the boy told him that belonged to the squirrels and that was their home, and he let that stay. So he did not cut down as many as he thought.

It makes us love trees more every time we plant them.

After the program in the school hall, we went on the girls' playground and planted trees.

Two schools had to plant a tree together. After we got our tree planted, we danced around it and the band played. We had a happy time.

Birds Identified on the Grounds of the Indiana School for Feeble-Minded Youth, February 22d to June 1st, 1907

(Birds marked * are known to be nesting on the grounds.)

Crows	Feb. 22	Black-throated Blue	
Red-headed Woodpecker	" 22	Warbler (one).....	May 11
Robin*	" 27	Scarlet Tanager.....	" 15
Towhee	Mar. 4	Oven Bird	" 15
Blue Jay*	" 8	Olive-backed Thrush...	" 19
Flicker*	" 13	Redstart	" 22
Black Birds	" 14	Great-crested Flycatch-	
Yellow-bellied Sapsucker	" 16	er	" 22
Yellow Warbler*.....	" 17	Turtle Dove*.....	" 24
Meadowlark*	" 21	Pine Warbler (one)...	" 24
Blue Bird	Apr. 8	Field Sparrow*.....	" 25
Song Sparrow*	" 24	Magnolia Warbler.....	" 25
Chipping Sparrow*....	" 24	Wilson Thrush.....	" 25
House Wren*.....	" 25	Loggerhead Shrike*....	" 27
Baltimore Orioles*....	" 26	Humming Bird.....	" 28
Brown Thrasher.....	" 27	Least Flycatcher (dead)	" 29
Chimney Swifts.....	" 28	Warbling Vireo	June 1
White-throated Spar-		Screech Owl.	
row	May 1	Pigeons*.	
Catbird*	" 1	English Sparrows*.	
Maryland Yellow-throat	" 7	Kingbirds.	
Kinglet (one).....	" 10	Cowbird (from eggs	
Red-breasted Nuthatch		found in nests of	
(one)	" 10	other birds).	
Goldfinch	" 10		

A Few Interesting Facts Noted

The small boys were found one day tearing up the sod and throwing worms into the forks of a maple, to which a mother robin would hop and return with the worm to her young.

A blue jay and robin were taken out of trees on the front lawn where they had become tangled in strings they were carrying to their nests. The blue jay was liberated and was none the worse for his experience; the robin died instantly and became rigid when taken hold of. He probably died from fright.

A loggerhead shrike used a locust tree across the road north of our grounds for his meat house. The following remains were found in two days:

A yellow warbler—impaled.

Feathers of a goldfinch.

A large brown wing, probably a brown thrasher.

A field mouse head—impaled.

Three large bugs.

The upper mandible of a flycatcher, or English sparrow.

A chipping sparrow, with head hung in forks.

A wing of a small bird like sparrow.

Twelve thorns were counted showing signs of flesh, hair or feathers.

The larger boys were very much excited at seeing blackbirds trying to rob some nests of robins on Mulberry Hill. The robins joined forces and drove the grackles away.

Wrens have built nests in boxes and held their own against the sparrow, within twenty feet of our south school windows.

We found a female Baltimore oriole voraciously eating the larvæ of some leaf erumpier in an ash-leaf maple. The sparrows each evening feast on the dandelion seeds on the front lawns.

Several times in nesting season a robin's and loggerhead shrike's nest were visited. Each time the female robin would fight, almost insanely, if we were within fifteen feet of her nest. The butcher bird, supposedly "the bloodthirsty," would sit within four feet of her nest and preen her feathers while we fed worms to her young.

A pair of orioles have built in the same cottonwood on the girls' playgrounds the last three years out of four.

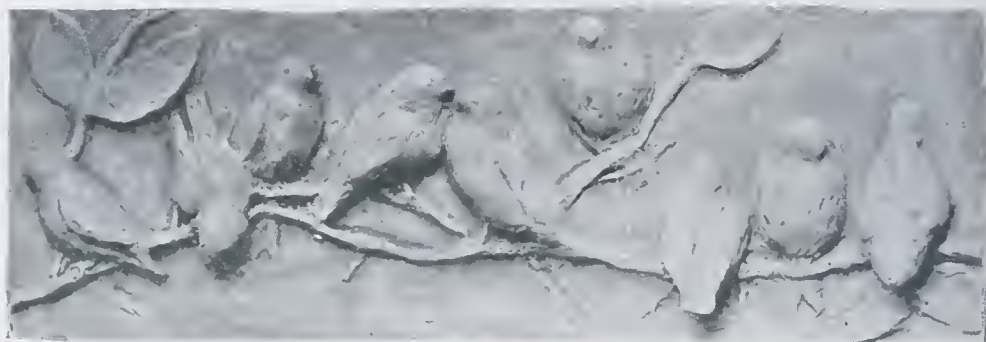
The Rescue of a Blue Jay

CLARA C., GRADE 7.

MAY, 1907.

One afternoon a teacher of our school took her class of girls out to gather flowers, and our principal went with them. As they were passing by the front of the building near the flag pole they heard a sound coming from the trees like a bird in trouble. They saw a blue jay hanging head-down from a branch of a tree, and it could not get away.

We got a step ladder and climbed up where the bird was hanging and soon found out the cause of its trouble. We decided that it was building its nest and had found a piece of thread. While carrying the thread to its nest it had stopped to rest and the wind blew the thread over and around its legs and feet and also around the branch on which it was sitting. When it was ready to leave the branch it was sitting on it could not fly because the string fastened it to the branch. The more it struggled to get away the tighter the string would become. It fell over and could not get back on the branch, and had to hang there until some one would come to release it. The principal cut the string and unwound the thread from the bird's legs, but it could not fly at first. We carried it to the woods. In a few moments it grew stronger, and away it flew. It gave a loud cry as much as to say, "thank you."



CAST OF SPARROWS—MAY W.

The House Wren

FANNIE B., GRADE 3.

MARCH 13, 1907.

My story is going to be about the house wren.

It is a short, fat bird and likes to make its nest in houses, that is the reason we call them house wrens.

The little papa bird came long before his mate and sang and sang, waiting a long time before she came. We sat in school and watched the wren build her nest in the little house that was made for her. She got some sticks that were too long so she had to pull them down till she could get the end into the hole. She was a long time getting the sticks fixed in her bill and then she pulled them into the hole and made the nest with them. She raised seven little baby wrens in this house.

One of them flew into our school room and I caught it and took it to our Principal and he showed it to the children and then put it in the house and it was very glad to get back to its father and mother and little sisters and brothers. Our school house is covered with honeysuckle and ivy vines where many sparrows build their nest, but our little wren was brave enough to fight her way and raise her large family within a few feet of the school house.



PHOTOGRAPH OF THE FIRST HOUSE PLACED,
AFTER TWO WRENS HAD REARED
THEIR BROOD OF SEVEN.

Johnny Appleseed

WILLIE D., GRADE 3.

MARCH 26, 1907.

He had an old sack for a pocket. He floated down the Ohio River in a narrow boat. He was born in Massachusetts.

He got the seeds from the Ciderpress, and he had his boat full of appleseeds. He had a little nursery by himself but he did not get anything for his work. He took his pillow for a kit, but he did not like to live in a house.

He died in 1847. His monument is in Ohio. The people keep his monument to remember him by. He never uttered an unkind word nor found any fault with any man.

His grave is in Allen County, two miles north of Ft. Wayne.

Johnny Appleseed

ROY E., GRADE 3.

MARCH 25, 1907.

John Appleseed was born in Massachusetts. He became known in 1789 when he wandered through Pennsylvania.

He was a queer man. He went around to the cider presses getting appleseeds. At last he had a half boat full. He started with them down the Ohio river and when he came to an open place he planted several thousand apple seeds, and then he made a fence of brush to keep out the wild animals. Then he would get in his boat and go on until he would come to another open space and then he would plant some more appleseeds. These seeds grew and soon there were orchards over all the country. This is why he was called "Johnny Appleseed." He had three motives, love, duty, and God.

When he slept he lay on the ground, the sky for his roof. He went bare foot most of his time. And when he went to anyone's house, he slept on the floor.

He came to Indiana about ten years before he died. He died two miles north of Fort Wayne and was buried there. They put a board slab at his grave, but it has rotted away and no man knows exactly the spot where his grave is today, but it is on the Archer farm in the old family cemetery.

Hawks

LYDIA D., GRADE 3.

MAY 1, 1907.

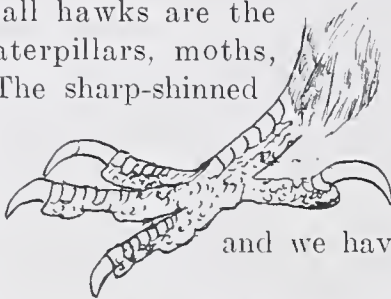
One day a flock of birds were flying through the air. They were singing and flying after each other or up in the fence posts. When suddenly the singing stopped and all the birds stood still and did not move a feather. You would have believed the fields were empty.

The reason was a hawk was up in the sky. Sometimes the hawks come so quietly that the birds do not have a chance to act as if they were dead.



When a hawk catches a chicken or a bird he carries them in his sharp claws to a tree and tears the feathers out. Then he takes pieces of flesh with his sharp curved bill.

Some of the small hawks are the large hawks eat caterpillars, moths, not other birds. The sharp-shinned bad hawk and kills One of these bad in the wire netting near us this spring school.



badest and most frogs, and mice and chicken hawk is a lots of chickens. hawks was caught of a chicken yard and we have it mounted in our

People used to hunt with hawks and trained them like dogs to fly after any bird the hunters wanted. Then they sounded a whistle and the hawks would come back.

The Woodpeckers

HALLIE I., GRADE 3.

MAY 13, 1907.

Our school is writing about woodpeckers and I am going to tell what I know about them.

There are a good many kinds of woodpeckers. Some eat ants and some of the woodpeckers eat nuts and fruits as well as insects.

The woodpeckers make their nests deeper than the rest of the birds do.

They do not build their nests but dig them out of the limb or trunk of a tree.

The flicker which belongs to the woodpecker family eats caterpillars and many, many ants. He will take his place on the ground beside an ant hill and take up thousands of them as they come in or go out of their homes. His tongue is long and covered with a gluey substance which causes the ants to stick to it when he touches them.

There are five or six species of woodpeckers well known over the eastern United States. In the west there are others of about the same habits. In the northern states a few species remain the entire year, but others are more or less migratory.

Farmers are apt to look upon woodpeckers with suspicion. When they see them on their fruit trees and pecking holes in the bark they think they are doing harm but they are doing lots and lots of good by eating up injurious caterpillars and insects which hurt, and might even kill the trees.

Our Shrikes

OTTO C., GRADE 4.

JUNE 3, 1907.

One evening two of our school boys were out near the gooseberry patch back of Sunset when they found a little chipping sparrow that had been hanged in the forks of an ash-leaf maple twig. They got it and brought it to our school. They then went back to



THE SHRIKE'S VICTIMS.

see what else they could find, and in the same tree they saw a shrike eating a little yellow warbler that it had stuck on a broken fork of a little bough. It had eaten one wing and the head, and was tearing off more feathers when they saw it. They looked around and found its nest with six little shrikes in it.

Its nest was made of sticks and grass and was lined with a few feathers that it had probably gotten off the other birds that it had killed. We watched the birds for several days until they were old enough to leave the nest. They looked so pretty sitting on our hedge fence. They were very tame and would not fly when we went near them.

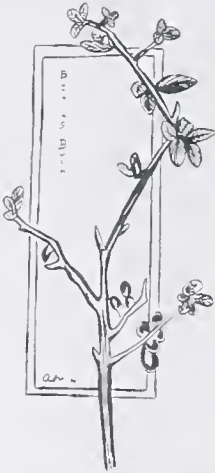
Not far from the nest there is a locust tree which was the shrike's meat shop. It had its meat hung up on the thorns so it could use it to feed the baby birds. There were several beetles, a mouse's head, a sparrow's bill, one wing about one and a half inches long, and another that measured full four inches hung on the thorns. Beneath this tree there were two or three handfuls of feathers and bits of hair. We found meat hung on at least twelve different thorns.

Our books tell us that shrikes would rather have grasshoppers, beetles, and meadow mice than birds, but when they can't get these, they take birds to feed the young to keep them from starving. Though a shrike does some harm he does lots of good. He never kills a bird just for fun like some people do. He kills it to get food for himself or his young.

Trees

MABLE B., GRADE 5.

MAY, 1907.



BURNING BUSH—SKETCHED—
LYDIA D.

The trees and shrubs on our grounds are very pretty. They give us shade and shelter. The trees are also used by the birds and squirrels for their homes. Men use the trees for building houses and making furniture. Sap flows from some of the trees which is made into syrup and sugar.

We can tell how old a tree is by cutting it down and counting the rings. We can not tell how old a tree is by its size. A tree that is only three feet high sometimes lives hundreds of years.

A class of our girls went along the river to sketch trees. They were sketching a grand old beech tree when the farmer who owned the land came along and said, "Why are you drawing that old tree, it is not even fit for fire wood!" Some people can not see the beauty and the good of old trees. This is the old beech sketched with a linden tree.

The trees we set out on Arbor Day grow to be large trees. They will give others shade and shelter long years after we are gone.



BEECHES AND LINDEN—FROM SKETCHES
ALONG THE ST. JOE—NELLIE C.

The Old Snag

OLIVER S., GRADE 5.

Nov. 1, 1906.

On last Arbor Day our Superintendent told the story of the "Old Snag." He said they needed more pasture land for the cattle on the farm, but there was not much room, so they decided to use a piece of woods for a pasture. There were a good many trees on the ground, so they decided to cut some of these down so as to let the sun shine through the trees and make the grass grow better.

The Superintendent and some of the farm boys started out to mark the trees that were to be cut down. The first tree they came to was an elm spreading wide. The Superintendent said: "We'll not cut this tree down boys, because it is a beautiful tree," and so the

On and on they went. Each time they came to a tree they had planned to cut there would be some good reasons for sparing it.

At last they came to an Old Snag. Then the Superintendent said, "We'll cut this Old Snag down."

"O, no, we can't cut that," said one of the boys.

"Why not, boys?" he asked.

"Because that's where our squirrels store their winter food," said the boys.

So the Old Snag was saved and the Superintendent said that as long as he has charge of the woods the Old Snag will remain as a cellar for our squirrels. As one of the girls was sketching the old wild cherry snag a squirrel came out of one of the holes and posed for her. This is the drawing of the old snag and squirrel.

No matter how poor a thing may be there is always some good in it. So after all the Old Snag was just as useful to the squirrels as the elm was for its beauty.



THE OLD WILD CHERRY SNAG —
DRAWING FROM LIFE—BELLE W.

and some of the farm mark the trees that The first tree they with its branches Superintendent said: tree down boys, ful tree," and so the

went. Each time they had planned to some good reasons

to an Old Snag. Then said, "We'll cut this

The Owl

CLYDE P., GRADE 5.

DEC. 1, 1906.

One morning when some boys came over to the school house they found an old owl sitting on some pipes. Probably he had come in through the window during the night.

That afternoon the janitor made a cage for the owl and put him in it. Then one of the boys brought him into our school room. We found out that the owl can not turn his eyeballs at all, so when he wants to look around he has to turn his whole head.

The owl is not as big as he looks because his feathers stand out loose from his body. We learned that the owl sleeps in the day time and goes to hunt food at night.

We kept our owl a few days and fed him raw meat and he ate it. But one day when we came over to the school the owl was gone. He got out during the night and went back to his own home.

The owl helps the farmer by eating field-mice, cut-worms, bugs, and insects. We have heard him lots of times, but we have seen him only once during the day time.

The Home of Birds

ISABELLE M., GRADE 5.

MAY, 1907.

The nest or home where a bird begins life, and finds shelter, is very interesting. Birds build in the highest branches of a tree, in the banks of the river, on the ground, in a hole of a tree, in old barns, and swing their nests from the limb of a tree.

In our school we have quite a collection of deserted birds' nests. Some were found on the grounds, some in the woods, and along the river. There is a great difference in most of the nests.

The rain crow's nest is very rudely constructed. It is made of thorny sticks put loosely together. It is not a very cozy nest for little birds, because it is very shallow, and the thorns may prick them.



ORIOLE NEST—FROM LIFE—NELLIE C.

The crow and hawk have nests very similar. The hawk's nest is larger and is built in the highest branches of a tree. It is made of sticks, leaves, and strips of bark from a tree. The red bird builds in thickets, and its nest is made of grape vines, rootlets, sticks, leaves, and the bark of the grape vine.

The blue jay has a nest made of thorny sticks, pieces of eord. rootlets, and leaves.

The chipping sparrow's nest is made of threads, horse hair and grass.

The robins find so many nice worms in the ground that they take part of the mud to help build their nest. The nest also contains grass, pieces of string or paper. It is not a very pretty nest.

The oriole and humming bird are considered the best arehiteets. The oriole swings its nest from a limb of a tree. It is fastened firmly to the branches on each side. The covering is the silky milk weed fiber, and the inside is horse hair, fine grass, and leaves. It is five or six inches deep, and is an exquisite nest.

A humming bird has a very different nest from the rain crow. It is very dainty and artistic. It is one of the finest builders. The inside is lined with fine grasses, and the fluffy part of eat tails. The outside is covered with grass and lichens of the log, giving the nest a pretty color.

The Bird House

SAM H., GRADE 2.

MAY 17, 1907.

I drew a bird house this year and last year, and I made both of the bird houses too. The wood that we made the bird houses out of last year was 3-16 inch thick and the wood this year is 3-8 inch thick. This year's bird house I made has a slanted roof and has a projection to keep out the sun and rain. The name of the wood is bass wood. Some of the holes we made first were about 2 inches across and the sparrows got into them and bothered the wrens and this year we made the holes 1 inch so that the sparrows can not get in. We got a bird house outside of the window

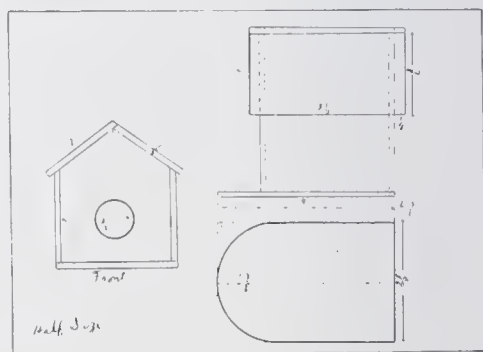
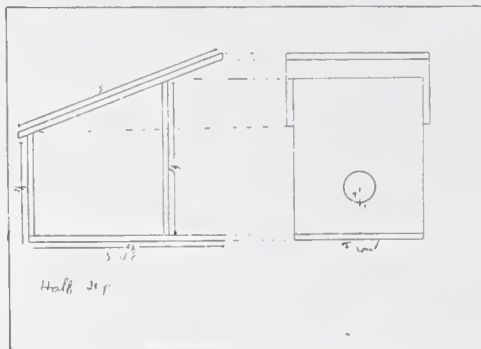


FIRST DESIGN—CLYDE P.

and one pair of wrens are building in it. Sometimes the wrens build several nests, but it is not known why they do it. We made about four dozen boxes last year. We made twenty boxes this year.



SECOND DESIGN—JESSIE M.



PLANS OF TWO BIRD HOUSES—SAM H.

Designs in Clay for Cover of "Arbor Day Annual"



VOLA W.



EMMA P.



SINGLE LEAF FORMS



FRANCES M'.

Some Queer Things About Birds

RHODA M., GRADE 7.

MAY 15, 1907.

We always thought the robin was a very gentle bird but we have found during the nesting season that they display a great deal of anger. Some children watched two robins build a nest on the school grounds. The family trouble began when the little blue eggs were hatched.

Robins have always been known to care a great deal for their little ones and are always ready to defend their nest when danger is near. This pair was very much concerned.

We were very anxious to see the little robins but had to be very careful how we approached the nest. The robin would fly to a tree and utter a harsh cry. If the intruder would not go away she would fly at the one who was so inquisitive and peck their head and face till he left the nest. In this way she protected her young ones from harm. She was always on the outlook for trouble and was always around and ready to defend the little robins. If all parent birds were like these, their young ones would not be exposed to so much harm.

We also found that birds become frightened, and sometimes die from fright when caught. We saw a robin that was fastened in a tree with strings it had been carrying to its nest. It became so entangled in the strings that it did not know how to get out. Some one who was passing by saw the robin and climbed the tree to rescue it; the robin became very much frightened. When it saw the man climbing the tree and trying to help it get free it was so frightened that it died in the hand of the man, and was lifeless when he reached the ground.

The Food of Tunn Birds

MARY L., GRADE 7.

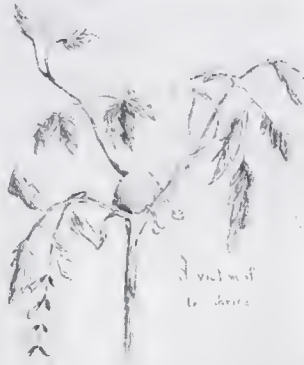
JUNE, 1907.

We have a great many birds on our school grounds. Some of them we have been watching, how they build their nests, how they gather their food, what they eat, and listen to their songs.

The other day an oriole was seen in a tree on the north side of our school house. It had been working very hard at something in its claws, which afterwards proved to be a leaf off of the ash leaf maple tree. The leaf had been stung by an insect, and had left its little larvæ there, this is what the oriole was eating.

If the oriole and other birds did not eat these insects we would not have very much food, either fruit or grain. It seemed as though the insects had a good start for nearly every leaf on the lower branches had been stung.

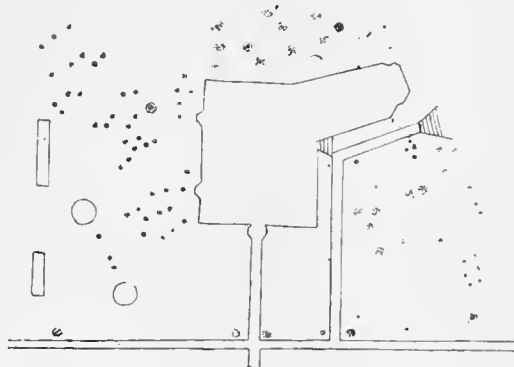
Another very interesting thing occurred north of the play grounds of next day the school noticed a something on an ash leaf maple tree. He supposed that the same thing that doing the day feather fly from the bird was sitting, he found that the He then drove the shrike away and saw a yellow warbler impaled on a broken twig of the tree. It was fastened through the body, and the head was entirely gone. I have made a drawing of it.



A VICTIM OF THE SHRIKE.

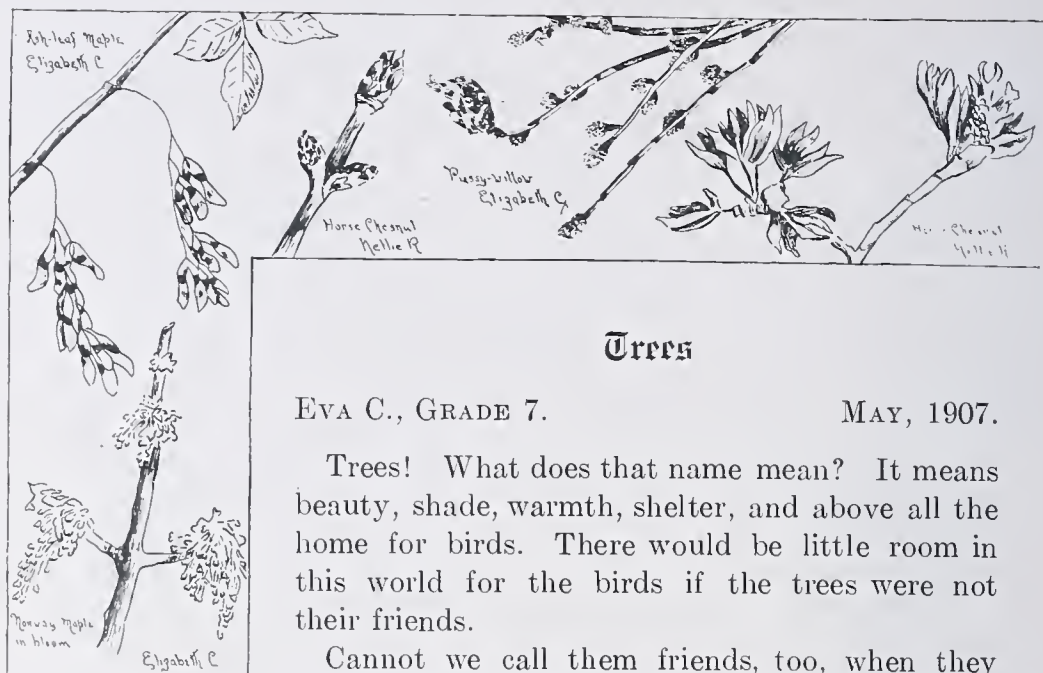
He saw the shrike fly, and following it he found a nest of little shrikes. The nest was hardly big enough to hold six of them. They were the prettiest little birds that we have ever seen on our grounds.

On looking farther he found a thorn tree which they used as a store house. On the thorns were birds, mice, bugs, and beetles. The tree did indeed look like a butcher shop.



PLAN OF LAWN AND SCHOOL HOUSE IN THE INSTITUTION GROUNDS, SHOWING LOCATION OF TREES, SHRUBS AND FLOWER PLOTS—MABEL W.

Within fifty feet of the building are: Norway Maple, White Maple, Red Maple, Cottonwood, Birch, Redbud, Scrub Pine, Scrub Beech, Burning Bush, Barberry, Wild Plum, Yucca, Spirea, Ivy and Honeysuckle (over building), Rose of Sharon, Wild Rose, Lilac, Snowball, Japanese Honeysuckle, Syringa.



Trees

EVA C., GRADE 7.

MAY, 1907.

Trees! What does that name mean? It means beauty, shade, warmth, shelter, and above all the home for birds. There would be little room in this world for the birds if the trees were not their friends.

Cannot we call them friends, too, when they rustle and murmur to us as we pass or lie in their cool shade? Oh, what consolation when life goes wrong to sit under a maple, oak, or any tree and forget everything except the songs they seem to sing to us.

Did we ever stop to realize how our world would look without trees and would we call the world beautiful without them?

Nature makes a beautiful picture of them in the spring when their leaves begin to come, and we look for miles around through a thin green veil, and we think there is nothing so beautiful. But when summer comes and the trees are in full dress, we never want to part with them as they are then. When summer goes they don their fall suits, which are the style now, and was the same thousands of years ago. We never tire of seeing them in all their gorgeous colors.



BLACK WALNUT—
FROM SKETCHES ALONG THE ST. JOE—EVA C.

Does winter's coming divest them of their beauty? Oh, no! they show then their strength and dignity when their massive trunks and limbs stretch out to defy winter's blasts. We know, too, they need rest because they did so much for us the whole three seasons out of four, and we are glad because we expect their first little buds as we do the first song of the robin or bluebird.



RED OAK—FROM SKETCHES ALONG THE ST. JOE—ISABELLE M.

Program for Bird Day—Indiana School

April 26, 1907

BOTH A. M. AND P. M. CHILDREN AT SCHOOL HOUSE AT 2:00 P. M.
ENTIRE DAY IN SCHOOL TO BE GIVEN UP TO BIRDS.

2:30 P. M. The regular moving bells will ring and rooms will file in school hall in usual order.

Overture—"Desdemona" Girls' Orchestra.

"The Forest Jubilee Band" Boys' Chorus.

Governor's Proclamation and Remarks.... Mr. Carroll, Supt.

Bird Songs and Games The Kindergarten.

"Somebody's Knocking" Earl Van C.

"The Robin" Raymond M.

"A Bird's Nest" Lydia D.

"Legend of the Northland" Rose H.

"A Crow Song" Six Boys.

Story—"Birds of Killingworth" Oliver S.

"Spring Talk" Fourteen Girls.

"The Spring Queen" Laura H.

"The Carol of the Wild Flowers".... Minnie B.-Elizabeth C.

"April's Song to the Birds" Beulah G.

"Spring" Rebecca R.

Reading—"The Migration of Birds"..... Elizabeth C.

"A Spring Meeting"..... Winifred L.

"Guessing What a Bird Is"..... Nellie C.

Bird Charades by each school.

"America" School.

4:00 P. M. Lines form and march with band to trees planted last Arbor Day, Sunset grounds. Form in groups, where picture will be taken. Dismiss to divisions.

At the opening the mounted specimens of birds, their pictures and nests will be briefly described.

Weeds



These two pictures were taken to show the work which birds do in destroying the seeds of certain kinds of objectionable plants. The picture on the left shows a plant of the "wild pepper grass" collected along a city street. The other picture is of a plant of the same species obtained from a field in the country when a flock of native sparrows was feeding. Notice how they have stripped the seeds and prevented the distribution of this troublesome weed. These two pictures show how birds assist in destroying weeds.

During the next year the office of the State Entomologist will start a systematic study of Indiana weeds and it is desired to enlist the help of anyone in the State who may be interested in the subject. It is a recognized fact that many of our worst weeds are of foreign origin and by an intelligent system of supervision it may be possible to do great good in preventing the introduction and spread of still others of these plant pests.

HOW ANYONE CAN HELP.

Whenever a new or strange weed makes its appearance near your home send specimens of it at once to the office of the State Entomologist together with all available information as to where it came from and for how long it has been established in the locality.

HOW TO SEND SPECIMENS.

It is always best to dry specimens of plants before shipping them. They can easily be dried flat by placing them between newspapers and laying a weight over them. In the case of weeds containing a large amount of water it is best to change the papers several times at intervals of a few days. When the specimen is dry it can be shipped flat.

The postage rate on all seeds and plants is one cent (1c) for each two ounces.

Small plants may be sent just as they are gathered, without pressing, but they should be packed carefully.

Whenever possible always secure the entire plant, both root and stalk. Specimens are desired in both flower and fruit, but where only one can be sent it is preferred that it be in fruit. Separate seed collections are always desirable and should include both the seed and the pod in which it grows.

Ship all specimens direct to

BENJAMIN W. DOUGLASS,
State Entomologist.

Room 121, State House, Indianapolis, Ind.

